

FORMULA 1® THE OFFICIAL HISTORY

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MAURICE HAMILTON | FOREWORD BY: ROSS BRAWN

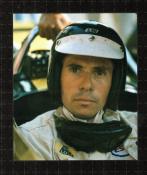




FOREWORD



S A RIGHT ROYAL OCCASION



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ON A WING AND A PRAYER







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FOREWORD

BY ROSS BRAWN

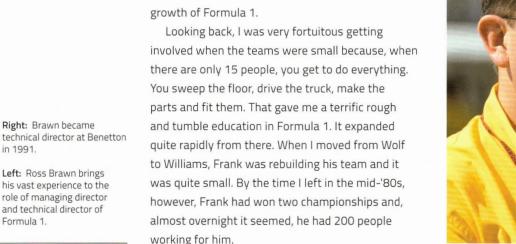
The most striking change in Formula 1 since I became involved in an active role has been the increase in the professionalism and resources of the teams. I had it brought home to me recently at an event in Canada. I was part of a forum and they pulled up photographs of my career at different stages. One image that really struck home was of my first job in Formula 1, working with the newly constituted Wolf team in 1977. A team photograph showed there were about 15 of us. I was a machinist at the time. There were a couple of mechanics, one or two fabricators and a few gophers. Not only was that the entire team, the Wolf then won its first race!

That seems incomprehensible now. Fifteen people can't provide the catering for a Formula 1 team these days! That's a massive change; the biggest I've seen. In its own way, the success of Formula 1 has brought that change. A top Formula 1 team such as Mercedes, including their engine division, has somewhere in the region of 1400 people involved - which is a credit to the success and commercial

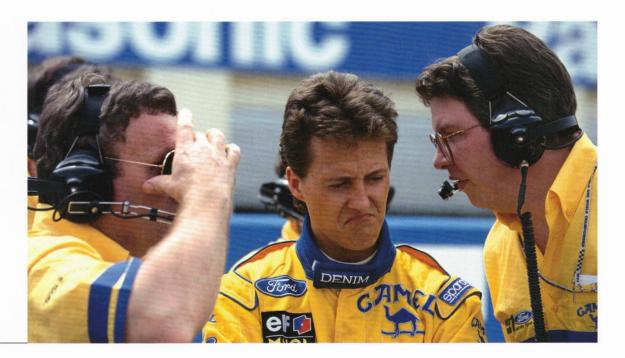
Looking back, I was very fortuitous getting working for him.

The other dramatic change I've experienced is within the safety of Formula 1. You had to be pretty brave to drive the cars from the early eras. The teams were totally focused on performance; there was almost no consideration for the safety of the driver. Everyone would try to be sensible - but, the problem was, safety wasn't mandatory. The cars were built as light as possible and we're also talking of a period when the driver's legs were sticking out beyond the front axle and into the nose of the car. Any frontal impact was going to break the driver's legs - or even worse.

The introduction of mandatory safety standards was a major change in the history of Formula 1 and in my career. I'm proud that all the engineers







Right: Brawn began his successful liaison with Michael Schumacher at Benetton in 1991.

in Formula 1 committed themselves to what was needed. That meant dealing with crash tests, strength tests and a huge amount of research into impact testing. The cars are relatively safe now but, because of the nature of the sport, they can never be 100 per cent. Nonetheless, they are remarkable vehicles.

The concept of the survival cell was a huge turning point in Formula 1 history. This went handin-hand with the work of people such as Professor Sid Watkins, who saw the weaknesses in the safety and medical facilities at circuits. Charlie Whiting, Race Director of F1 for many years, was also a big influence. They carried on the work of Jackie Stewart, who was not afraid to make himself very unpopular when he was driving in the 1960s and early '70s and banging the drum about the need to recognise safety. We take a lot of these aspects for granted now but, 30 or 40 years ago, that wasn't the case. You would, for instance, turn up for a test session somewhere and there was no safety helicopter, but the test would go ahead regardless. We wouldn't dream of doing that now.

The process has continued in recent years with the introduction of many prescriptive safety components. The Halo, for example, is one and it was pretty controversial. But now that's a standard component that every team must fit to their car - and nobody thinks about it any more even though some people became quite testy when it was introduced! In truth, no one likes change - unless it's to their obvious advantage.

With regard to performance, F1 engineers will examine each regulation and look at extracting the maximum out of it within the conventional interpretation. They will then look for the alternative interpretation. I know from experience there's quite a buzz that comes from taking a completely different interpretation that's valid - no one else has thought of it - and suddenly you have what you hope will be a performance advantage. If I look back over cars I've been involved with, a good example is the Benetton with which we won the World Championship with Michael Schumacher in 1994. We did it thanks to a fantastically deep and diligent application of the regulations all the way through and the Benetton was a great racing car as a result of it.

With the complexity of challenge of Formula 1 and the scope, there's no doubt a good big team will always beat a good small team. There is no way around that. They are just able to do everything much more effectively whereas, in a small team, you're looking for the revolutionary success. You'll never succeed with the evolutionary process because a big team is just evolving so much more effectively. They're doing things every day to find a better material, find a better way of using it, find a better way of designing it.

Saying that, competent small teams are very important to Formula 1. If I had an ambition now it would be to have a good midfield team scoring





Far left: Brawn (pictured with Jean Todt and Rubens Barrichello) masterminded the technical side of Ferra impressive resurgence.

Left: Running his own F1 team in 2009.

points, getting on the podium, winning a race – perhaps in slightly fortuitous circumstances – and also making a profit. Once you do that, you've got a sustainable system. You've got a good reason for owning a Formula 1 team over and above the passion that drives most of these midfield teams. We are fortunate that we have their drive and ambition because it's difficult for the small teams on a commercial basis. Owners such as Lawrence Stroll, Finn Rausing and Gene Haas have a lot of passion for the sport, which is wonderful to see. But we shouldn't rely only on that; we have to make the teams commercially sustainable.

When it comes to the championships, priority varies between drivers and teams. The teams tend to value the constructor's championship but I'd say externally, particularly now I've been on this side of the business, the driver's championship clearly is the strongest and gains the most exposure. People are talking about Lewis Hamilton having six World Championships. They know how many races he's won and they know Michael Schumacher has got seven World Championships. Our research has shown that's what people talk about; it's what they measure.

On the commercial side of Formula 1, a major change has happened more recently following Liberty Media taking ownership. Previously, Bernie Ecclestone did an incredible job in pulling everything together because the F1 teams made a pretty disparate group before then. But Bernie recognised the potential. He was the architect of putting together the commercial platform that Formula 1 has thrived off during the last 30 to 40 years. I think the time had come to move into a new era. Bernie's style was very successful, but it was quite confrontational. It was team against team and he was very smart in recognising that dissent was the best way of him managing it all. He was never slow in encouraging a bit of conflict between the teams!

We are in a new era which has a different philosophy; a different approach which effectively says we should all be working very strongly together to lift the sport to the highest possible level. The integrity of the sport is absolutely vital. It is a competition between drivers and between teams. The integrity of that competition has to be sacrosanct otherwise we lose the value of the sport.

But there is plenty of scope within that to make the sport more engaging with the fans and more commercially successful for the participants. The philosophy of Liberty Media is that we're in this for commercial reasons, but we are willing to invest the money to make the sport as great as it can be. We are not a venture capital company with the single intention of extracting the maximum profit from the sport. We are making a healthy profit — but we are putting it back in.



Opposite: Ross Brawn played a major part in establishing the Mercedes team between 2010 and 2013.

Right: Jenson Button became World Champion with Brawn during an extraordinary season in 2009.

> This organisation we now have within our London headquarters is focused on reinvestment by Liberty Media into the sport. This is presenting a tremendous new opportunity and I think most of the teams understand and appreciate that. Sean Bratches, who was our commercial director - he is retired now from Formula 1 – has been a breath of fresh air. One of his favourite sayings is that when the tide goes up, all the boats rise with it. This is a fundamental tenet that we need to get the participants and the promoters in Formula 1 - in effect, the whole Formula 1 family - to recognise. Do that, and we can raise the entire sport to even greater heights and hopefully everyone, from the teams to the fans, will gain.

> We are an amazing and unique sport. For example, you can talk to a driver five minutes before he gets in his car and competes. You can even hear him communicating with his team in the race. You couldn't do that in football; you couldn't do that in any other sport I can think of. We've got this fabulous opportunity of engagement that fans can have with the sport and we've got to sensibly maximise that and fully recognise the unique sport we have.

> Many of the things we are doing in Formula 1 have not been done before. We are achieving that by studying the fans and having a deeper understanding of their profile and what they want. Of course, as well as bringing new fans into the sport we mustn't alienate the ones that we've built up over the years. We need to protect what they enjoy.

My enjoyment of Formula 1 started with my Dad taking me to races. He ran the racing division of a major tyre company and, through that, I found myself in a privileged position. I remember meeting Graham Hill – I never met Jim Clark unfortunately - but I recall the drivers and everyone involved seemed to have a pretty good lifestyle; there was a lot of fun going on! It was nowhere near as sophisticated as today, the teams were working out of rudimentary trucks parked in gravel paddocks at Silverstone or Brands Hatch. There were no motorhomes and certainly there was no strong security; everything seemed free and easy-going.

That was definitely the catalyst for me to engage with motor racing and try to understand it. I loved the engineering side and it became an ambition to be able to use that in motor racing. But I must admit, when I started, I thought it would be for a year or two and then I'd go back to a proper job! And now, more than 40 years on, here I am, welcoming in the 70th anniversary of a sport that has changed immeasurably, changed my life immeasurably, and yet remains as captivating and challenging as it always was.





50SI ARIGHT ROYAL OCCASION

The FIA Formula One World
Championship™ began on a high
note when King George VI and Queen
Elizabeth attended the FORMULA 1
BRITISH GRAND PRIX at Silverstone.







1. A RIGHT ROYAL OCCASION

The birth of the FIA Formula One World Championship was as grand as you could wish for in 1950. The presence of King George VI and Queen Elizabeth at Silverstone may have conferred a sense of regal approval but, behind the bunting and the banners, the staging of the British Grand Prix was incredibly rudimentary by any standard.

It did not matter in the slightest. Paraphrasing the Russian proverb about the great dancing bear, the marvel was not the manner of running a Grand Prix on a converted airfield, but the fact that there was a motor race at all.

This had come just five years after the end of the devastating war in Europe and less than three years since motor sport fans in Britain had faced the continuing prospect of never seeing a race, let alone taking part in one. In May 1950, however, not only was there an international event receiving royal patronage, but the race had also been given the singular honour of inaugurating a championship with world status. Such apparent global acknowledgement was actually as tenuous as Silverstone's claim to join the ranks of Monte Carlo and Monza as an atmospheric motor racing arena.

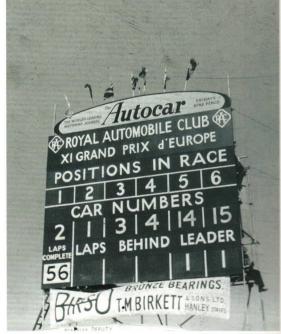
formed Féderation Internationale de l'Automobile (FIA) took it upon themselves to unite the jumble of racing series and vague championship definitions by laying

down sets of regulations for various classes, calling them Formula A, Formula B and Formula C (quickly to become Formula 1, 2 and 3) and instigating an official World Championship.

While the rules were clearly defined, the series title was more ambiguous, thanks to all of the designated races actually being in western Europe (at least until 1953, when Argentina was included). In order to make the championship as global as its name suggested, the Indianapolis 500 was nominated as a qualifying round. This absurdity would last for 11 years before it was admitted that the 500-mile race on a banked oval, for all its unique and colourful challenges, had no connection whatsoever with Formula 1.

Grand Prix races had existed for five decades, the term 'Grand Prize' having been given to marathons run between major cities as car manufacturers, such their worth while battling through the dust on rough and rutted roads. 56 of the 70 laps completed

Previous pages: King George VI shakes hands with Prince Birabongse Bhanudej Bhanubandh of Siam prior to the start of the 1950 British Grand Prix. Left: The 1950 British Grand Prix gets underway as Renault and Mercedes, used competition to prove at Silverstone, and with it a new chapter in the history of motorsport. Right: The Autocar-As Europe regrouped following the war, the newly sponsored leader board, with





Right: Fangio managed to pick his way through the carnage during the first lap of the 1950 Monaco Grand Prix.

The FIA Formula One World Championship, however, was up and running, starting at Silverstone on 13 May 1950. The venue, straddling the border between Northamptonshire and Buckinghamshire, had run motor races before. The first - the RAC Grand Prix in October 1948 - had attracted racestarved spectators in their thousands. Traffic had queued for several miles in the country lanes surrounding the airfield's flat expanses. The fans had come to see proper racing cars – Maseratis from Italy, Talbot-Lagos from France – driven by Luigi Villoresi, Baron Emmanuel de Graffenried, Prince Bira and other "foreign" drivers with romantic-sounding names.

A combination of the perimeter road and runways had been mapped out to create a 3.8-mile track. By 1950, the circuit had been switched completely to the perimeter road to mark the beginning of what would become a classic high-speed layout. In the beginning, however, there was nothing elegant or memorable about the facilities - if you could call them that. Once they had managed to get through the gates, spectators were faced with haphazard parking, basic lavatories, barbed wire and mud everywhere with ropes and straw bales defining the boundary between the enclosures and the race track.

Such discomforts, initially considered an irrelevance by spectators when looking forward to the thrill of a full-blown Grand Prix, were elevated to matters of crabby consequence when the race turned out to be a dull procession. The Alfa Romeo team filled the top three places, finishing six miles ahead of the grandly named Yves Giraud-Cantabous in his rumbling Talbot. There were just six cars running at the end of two-and-a-quarter hours of so-called racing. It had not been captivating enough to prevent the likes of a disgruntled Mr. A. P. Bird from writing to Motor Sport magazine to claim: "The lavatory accommodation was nothing short of disgusting." It could only be assumed that the visiting Royal party had no such concerns despite their viewing platform being made of scaffolding, albeit tastefully disguised beneath drapes and carpets.

A regal theme continued at the second round of the championship in Monaco. Prince Rainier enthusiastically supported the Grand Prix, first run through the streets of the Principality in 1929, but it was struggling to make ends meet to such an extent that the race planned for 1949 had been abandoned. The announcement of a World Championship quickly motivated the Monegasques' desire to be a part of it, even though their race would continue to be on an unsteady financial footing.

Helping the cause, however, would be the addition of Ferrari to the entry, the Italian team having missed the British Grand Prix in an attempt to regroup during one of the many periods of change within their structure. The 1950 Monaco Grand Prix would be memorable, not so much for a multi-car accident, but more for one driver's perceptive method of dealing with it.



FANGIO: DIGNIFIED AND FAST

Juan Manuel Fangio had claimed pole at Monaco and taken the lead on the first lap. Coming through Tabac corner on the harbour front, the Argentine driver noticed that the wind had carried spray onto the road. Giuseppe Farina, following closely in his Alfa Romeo, did not see the hazard and spun across the track, only to be hit by another competitor. Some cars got through but several did not, each collision blocking the race track even further. All of this was out of Fangio's sight as he accelerated towards Tabac for the second time. He seemed destined to crash into the mayhem yet, for no apparent reason, he backed off, motored gently round the corner and picked his way through the disaster area.

In the absence of warning flags that would later become *de rigueur* in motor racing, how had he known? Fangio had noticed something unusual about the crowd overlooking Tabac. There was movement but the general colour of the scene did not seem right. Then he realised he was seeing the backs of the spectators' heads; they weren't watching him and yet he was leading the race. Something was holding their attention. So, he backed off. This, the world was about to learn, would be the mark of one of the greatest drivers of all time.

When he arrived in Europe in 1949 to make his name, Fangio was 38 (21 years older than Max Verstappen when the Dutchman made his F1 debut in 2015). Age was clearly no obstacle as Fangio won

six of the 10 races he entered and signed for Alfa Romeo in 1950. He raced alongside Farina, a haughty Italian who had won the inaugural race at Silverstone. Fangio's victory in Monaco would put the team-mates on a level footing that would continue through the year as they won three races each. Farina, however, would earn the privilege of becoming the first-ever World Champion thanks to scoring additional points with a third place in the Belgian Grand Prix. Fangio would have his day; five times over, in fact.

The first would come the following year at the end of a memorable battle with the Ferrari of Alberto Ascari, the Italian who would then take his turn and dominate the championships in 1952 and 1953. For a man who pursued a profession riddled with risk, Ascari was incredibly superstitious, so much so that a fear of black cats would cause him to turn around and drive in the opposite direction rather than pass one on the street. Such a contradiction would reach an unnerving and mysterious level during and following the Monaco Grand Prix in 1955. A combination of oil on the road and failing brakes on his Lancia had sent the dark red car through a flimsy barrier and into the harbour. The Lancia sank to the bottom, but Ascari had surfaced with nothing more than a cut nose.

Four days later, he appeared to fly in the face of such good fortune by arriving unannounced at his local track, Monza, and asking to drive a Ferrari sports car he was due to share in an endurance race the following weekend. Not only was this on the

Above: The Ferrari of Alberto Ascari during the 1950 Swiss Grand Prix, held on the fast and dangerous Bremgarten circuit.





Left: Juan Manuel Fangio overcame stifling conditions to win the 1955 Argentine Grand Prix in his Mercedes-Benz W196.

26th of the month – a date on which he swore never to compete because of the death of his father in a race on 26 July 1925 - but he also borrowed a white crash helmet rather than use the lucky light-blue helmet he always insisted on wearing. Ascari crashed mysteriously – and fatally – three laps later.

Fangio, meanwhile, had switched to the Mercedes team, the German marque having made a comeback to motor racing after being a front-runner in the 1930s. Mercedes would redefine F1, the silver cars taking the breath away with their streamlined looks (for the fast tracks) and the very latest in engine and chassis technology. Political necessity required the use of German drivers, but they made an exception in the case of Fangio – which said as much about the management's pragmatism as it did about the South American's unsurpassed skill. Fangio, having won the championship after starting the 1954 season in a Maserati, rewarded Mercedes by taking the title in 1955. But it was not as straightforward as his four victories would suggest.

In the 1950s, Grands Prix were about endurance, the 300-mile races placing as much emphasis on survival as speed. The opening round of the 1955 championship in Argentina was a classic - if not shocking - example.

The temperature on that January afternoon reached 36°C. Inside the cars, with the heat surging in unrelenting waves from the front-mounted engine, it was much worse. The rules permitted a car to be shared by more than one driver; an option all but two

of the 21 starters were only too happy to accept. Fangio, and another Argentine, Roberto Mieres, chose to go it alone for the three hours and two minutes it took to complete 96 laps of the Buenos Aires Autódromo. Several drivers returned to the pits and collapsed with exhaustion long before the finish; others, disorientated by the mirage effect of the shimmering heat, spun off the road as if under the influence of alcohol.

Short and stocky he may have been, but Fangio's sturdy build was put to a supreme test, particularly when a chassis tube inside the cockpit became overheated by the twin exhaust pipes exiting from the right-hand side of the car. Fangio was in excruciating pain as his right leg was constantly pressed against the red-hot pipe, thanks to the bulky central transmission forcing him to sit with his legs wide apart. Fangio's flesh, protected only by cotton overalls, was burning. He would carry scars on his calf for the rest of his life.

With 400,000 adoring fans having flocked to the track on the outskirts of the city, their hero was not about to give up. "I was at the end of my tether," Fangio would admit later. "I won that race simply by staying in the car. My body seemed to be on fire and my leg was burning so badly I could smell it. To stop myself passing out, to avoid cracking up, I tried to imagine I was sitting in a bath of ice. When it was all over, they had to lift me out of the car. They laid me on the floor of the pits and gave me an injection."

Opposite: 1950 British Grand Prix, Silverstone. Juan Manuel Fangio prepares for the start of the World Championship in his Alfa Romeo 158.



Right: Motor racing fans enjoyed use of the permanent facilities at Aintree when the Grand Prix was held on the site of the famous horseracing course for the first time in July 1955.

THE BOY MOSS

Finishing fourth, two laps behind Fangio, came another Mercedes, shared by three drivers. A 25-yearold Englishman, Stirling Moss, counted himself lucky to be among them for reasons other than this being his first Grand Prix drive with a major works team. Moss had been running second when his Mercedes stuttered to a halt with fuel vaporisation. As he stepped slightly unsteadily from the car, watching medics assumed Stirling was another victim of the searing conditions. Before he knew it, Moss was bundled onto a stretcher and taken to the medical centre, the volunteers sure in the knowledge that this man's angry protests in English were the work of another driver deranged by the heat. Once an interpreter had been found, Moss was free to return to the pits where the team manager, Alfred Neubauer, threw a bucket of water over his driver and had him take over another Mercedes. It was as close to a baptism of fire as it was ever likely to be.

Stirling Moss had been building a reputation as a thrusting young driver who adopted professional standards in a sport that remained cheerfully amateur in levels beneath F1. That alone was not enough for Neubauer, the imposing and authoritarian team manager did not consider Moss as a driver for Mercedes in 1954 because of his lack of F1 experience. Moss, with the help of his father and a few supporters, found the £5,500 (a considerable sum

at the time) needed to buy a Maserati 250F from the Italian firm and go racing as a private entrant.

Moss did enough that year to warrant a place alongside Fangio in 1955, and he later described the experience as the best schooling a young driver could wish for following in the wheel tracks of his hero. Moss would have his moments, most notably when racing at home in July 1955.

Silverstone had continued grow as a permanent race track good enough to stage the British Grand Prix in successive years. Meanwhile, the associated popularity of motor racing caught the eye of Mirabel Topham, owner of the Aintree horse racing course. At a cost in the region of £100,000, Mrs Topham made ready a three-mile track in the vicinity the famous steeplechase course and overcame various problems with licences, roads, footpaths and parish councils. A date was set for July 1955.

From the moment of arrival, spectators were struck by the massive uplift in comfort, the permanent grandstands and facilities associated with horse racing making the tents and scaffolding of Silverstone seem second-rate. This came at a cost, one correspondent complaining to Autosport magazine that the admission and grandstand seat charge of two pounds and five shillings (now £2.25) was 15 shillings (75p) more expensive than Silverstone. Mrs Topham duly responded that admission to the paddock had been free and spectators had the benefit of fixed assets worth more than £1 million (then considered to be a massive sum of money).

Opposite: With his helmet and goggles removed to reveal the grime of a Formula 1 race, Stirling Moss enjoys a drink after sharing his winning Vanwall with Tony Brooks during the 1957 British Grand Prix at Aintree.





Right: The awful aftermath of one of motor racing's biggest tragedies, when a car went into the crowd and killed more than 80 spectators during the 1955 Le Mans 24 Hour race.

Whatever the cost, 150,000 spectators received good value on a glorious summer's day as Moss, closely followed by Fangio, won his first (of an eventual 16) Grand Prix, the Englishman never entirely sure whether Fangio's basic sense of decency had allowed the home hero to have his moment in the sun.

There had, however, been dark clouds on the horizon for the previous few weeks following a terrible tragedy in the Le Mans 24-hour race. A Mercedes 300SLR struck the back of an Austin Healey that had pulled out to avoid another car slowing for a pit stop. The Mercedes flew into the crowd and killed more than 80 spectators. The devastating effect would be farreaching, Mercedes pulling out of motor racing at the end of the season and Switzerland - which had staged five Grands Prix on a fast and dangerous road circuit at Bremgarten – banning motor sport within its borders.

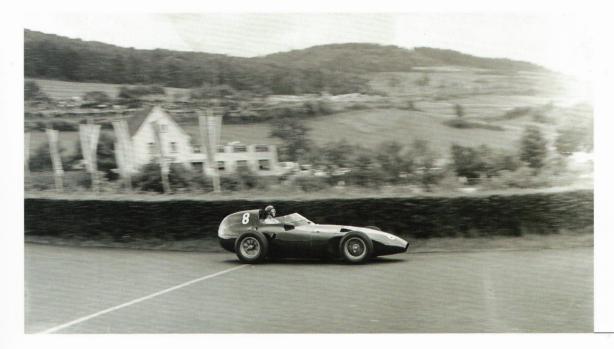
Fangio accepted an offer from Ferrari for 1956 and was in the running for another championship when the season reached its final round in Italy in September. A fourth title seemed to have gone away after a broken steering column had forced Fangio into the pits and retirement. Enzo Ferrari encouraged rivalry between his drivers but Peter Collins put that to one side as he handed over his Ferrari to allow Fangio to continue. In the process the young Englishman ended his slim chance of taking the title. Fangio was deeply touched by such a selfless act.

Collins was not alone in being in awe of the maestro. He would receive confirmation – not that it was needed - of such greatness the following year as Fangio had his finest season, culminating in a breathtaking performance at the Nürburgring. This 14-mile monster, snaking through the Eifel mountains south-west of Bonn, had been built in the 1930s as a means of showing off German automotive superiority. Fangio used the relentless undulations and more than 150 corners to demonstrate his innate skill, particularly at the wheel of a Maserati 250F, a car he could bend to his will.

A lengthy pit stop meant he not only lost the lead but also dropped 51 seconds behind a pair of Ferraris driven by Collins and his fellow-countryman, Mike Hawthorn. Thinking they had the race sewn up, the Englishmen did not allow for what would be Fangio's greatest drive among many. Pulverising his own lap record by almost half a minute, Fangio caught and passed the Ferrari drivers before they knew what had happened. He had driven on the edge like never before and swore never to do it again. Fangio retired the following year. His record of five world titles seemed unlikely to be beaten.

ONLY RIGHT AND PROPER

Moss was struggling to win just one World Championship. He had finished second for three years running and would be runner-up yet again in 1958, largely because of an act of extraordinary selflessness that would be unimaginable today.



Left: Understated class. Tony Brooks heads for victory in his Vanwall during the 1958 German Grand Prix on the Nürburgring Nordschleife.

The previous year, Moss had switched to Vanwall, a move that suited the intensely patriotic Englishman since this eye-catching green car was the product of British engineering at its best. The industrialist, Tony Vandervell, had established his team with the sole intention of, as he put it, "beating those bloody red cars." Ferraris and Maseratis would continue to be the bane of his life (particularly when driven by Fangio) but that did not prevent an exceptionally proud moment at Aintree in July 1957 when Moss, sharing a Vanwall with Tony Brooks, became the first Briton to win his home Grand Prix in a totally British car. There seemed every reason to be hopeful going into 1958, knowing that Fangio was about to retire and the Ferrari effort would be split between Hawthorn and Collins with their Italian team-mate, Luigi Musso, also in with a shout.

In fact, there would be fifth contender as Brooks showed his understated class by winning at two of the most demanding tracks, Spa-Francorchamps and the Nürburgring. Victory at the latter was tinged with sadness after Collins crashed fatally while giving chase to the Vanwall. It was yet another blow for Ferrari, Musso having been killed a month earlier following a crash during the French Grand Prix at Reims.

The championship, however, was boiling down to a fight between Moss and Hawthorn, the Vanwall driver helping his case by winning on the streets of Oporto – and then damaging it by coming to the aid of his rival. Hawthorn, heading for second place, had spun and stalled on the last lap. The Portuguese officials had

tried to exclude Hawthorn on the grounds that he had motored along the track in the opposite direction while restarting his car on an incline. Moss, without prompting, argued that Hawthorn was not on the track at all, but on the pavement. The officials relented and Hawthorn collected the points that kept him in championship contention. Moss was genuinely taken aback in subsequent years when questioned about the apparent folly of helping a rival. "I had no hesitation in doing it," he said. "Mike did go up the escape road and that was penalty enough in my view. I can't see how this is open to debate. He was not on the circuit when restarting his car. The officials were wrong."

Another victory for Brooks, this time at Monza, did little to change the two-way championship fight going into the final race in Morocco. The mathematics were simple; if Hawthorn finished second or higher, the title would be his, no matter what his rival did. Moss drove brilliantly, won the race and set the fastest lap (for which there was one point awarded). But Hawthorn finished runner-up and became the first British World Champion.

Having lost his mate, Collins, an already difficult year for Hawthorn got worse when Stuart Lewis-Evans succumbed to bad burns inflicted when the promising young Englishman crashed his Vanwall in Morocco. In the same race, a Belgian driver had suffered chest and rib injuries after overturning his Ferrari; a Frenchman had sustained a fractured skull and a British privateer had been fortunate to walk away from massive accident. Any one of those





Above: The Ferraris of Phil Hill and Mike Hawthorn on the Ain Diab circuit during the Moroccan Grand Prix, the final round of the 1958 World Championship. By finishing second, Hawthorn would become the first British World Champion.

Top right: Mike Hawthorn, with his good looks and trademark bow tie, cut a dash in the paddock.

incidents today would be the cause of widespread debate and criticism across social media. In October 1958, these were no more than footnotes - if mentioned at all - in most race reports.

A few days after the race in Casablanca, Hawthorn announced his retirement. Three months later, the reigning World Champion lost control of his Jaguar road car near Guildford in Surrey and smashed into a tree. Hawthorn was killed instantly. He was 29.

FRONT TO BACK

Almost unnoticed in January 1958, the Cooper Car Company in Surbiton, Surrey, had revealed a new car. Cooper was not new to F1, having raced Formula 2 versions of their cars, usually in the back half of Grands Prix as the less powerful machines struggled to keep up. The most significant detail, however, was the fact that the engine was in the rear rather than at the front. This offered a lighter and more nimble car, Stirling Moss making good use of a privately-entered version when he ran non-stop and won the 1958 Argentine Grand Prix despite his rear tyres being worn to the canvas. Moss won again in Monaco, but it was felt to be a one-off on the tight, twisty street circuit.

Sensing the potential, however, Cooper asked their supplier, Coventry-Climax, to produce an engine to the maximum 2.5-litre capacity permitted by Formula 1. Three Coopers, to be driven by Jack Brabham, Bruce

McLaren and Masten Gregory, were made ready for 1959. When Brabham won the first Grand Prix of the season at Monaco, the writing was on the wall. He would arrive at the final round at Sebring in the United States knowing that fourth or higher would be good enough to defeat both Moss in a privately-entered Cooper and Tony Brooks, now driving for Ferrari. This showdown followed the hoped-for script when all three were on the front row of the grid. Or, they were until a cheeky move by Harry Schell came into play.

Something of a practical joker, the Franco-American had spotted an internal road part way round the airfield circuit. Feigning a problem with his BRM during timed practice, Schell had pulled off the circuit, entered the service road and then gently motored to a point where it reached the return leg of the 5.2-mile race track. Choosing a moment when the track was empty, he rejoined and finished his lap to record a time good enough for the front row and several places ahead of where he really ought to have been.

Confronted by the seemingly irrefutable evidence of their stopwatches and no reports to the contrary from the amateur marshals on the track side, the time keepers felt they had no option but to meet Schell's voluble demand that he should be placed third, thus demoting the hapless Brooks to fourth place on the second row. The Ferrari team manager, sensing a rat but unable to prove it, went berserk - to no avail.

Schell started alongside Brabham, with Moss on pole at the opposite side of the front row. With every



Left: Jack Brabham leads the rear-engine revolution as he heads for victory in the 1959 Monaco Grand Prix.

movement of every car measured to the millimetre by thousands of sensors and a driver being observed if he so much as changes his mind these days, such an episode seems absurd. But it happened in December 1959 and would have a knock-on effect - in every sense - for poor Brooks.

He was now directly in front of Wolfgang von Trips, who we will meet again in the Sixties. At this stage in 1959, however, the German was fighting to retain his place in the Ferrari team – and took that desire a bit too far when he ran into the back of his team-mate during the first lap.

This put Brooks in a personal dilemma. His Ferrari felt okay, but he couldn't be sure. Having continued to race a sports car that was damaged at Le Mans, Brooks had suffered bad accident as a result. A deeply religious man, Brooks felt he owed it to himself to protect a life that was precious. He duly pulled into the pits to have the Ferrari checked over, knowing such a move was going to seriously reduce this rare chance to become World Champion. The car was found to be without serious damage. But his championship had gone. As it had – yet again – for Moss when his gearbox failed after six laps.

Brabham looked set to reap the reward – until the last lap when the Cooper ran out of fuel. Brooks had been recovering at a respectable pace and rushed past the stuttering Cooper to assume third place. Desperate to score the necessary points, Brabham pushed his car uphill towards the chequered flag. He

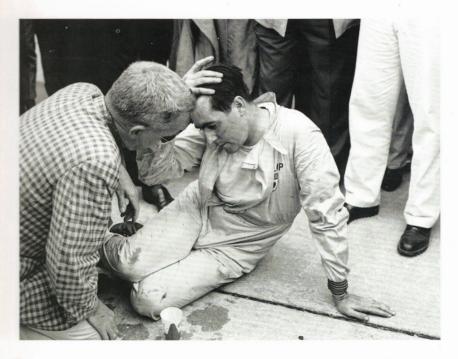
duly became 1959 World Champion and collapsed with exhaustion at one and the same time.

Bruce McLaren finished first, the New Zealander becoming the youngest Grand Prix winner at 22 years, three months and 12 days. That record would be undercut several times in the coming decades but the winner of the last race of the Fifties would be 21 years younger than the winner of the first on another airfield circuit in May 1950.

McLaren would also be representing a new wave of F1 teams. The first year of the World Championship had been all about the magnificent works teams from Italy. By comparison, the British at the beginning of the Fifties were a bunch of happy amateurs, taking pleasure from keeping their outof-date machinery running and simply happy to be racing. There appeared, however, to be one very grand exception as the World Championship got under way in May 1950.

ALL NOISE AND NO ACTION

The flamboyant Schell possessed a strong sense of humour. He would have needed it 10 years before when his team, BRM, was starting out. As mentioned, the British racing scene in the immediate post-war period was oily rags and amateurism. Having raced against the professional teams from Europe in the 1930s, Raymond Mays was sure



Above: Jack Brabham collapsed after pushing his Cooper across the line to finish fourth in the 1959 United States Grand Prix and claim the World Championship.

British engineering could provide more than a match - provided it was organised properly.

As soon as World War II had ended, Mays circulated British industry in an effort to raise finance for a scheme to, as he put it, "remove England from the back seat in which she languished all too long in pre-war competitive motoring." The response to the creation of a British Mercedes Benz Rennabteilung (racing department) was immediate. Manufacturers such as the Standard Motor Company (later to become Standard-Triumph) contributed £5,000. Within 12 months, Mays had collected £25,000, with the promise of a similar amount in parts.

Despite the generous impression of such a sum in the late 1940s, it would not be enough. Post-war inflation made a mockery of the budget but, with more than 100 firms involved, Mays was committed whether he liked it or not. A Trust was formed of individuals or firms who had subscribed £100 or more. It was agreed that the car would be known as the British Racing Motor, or BRM for short.

Perhaps feeling that they had to give value for money, Mays and his engineer partner, Peter Berthon, then added to the financial problems by opting to construct a complicated and highly ambitious V16 engine with a supercharger developed by Rolls Royce, based on their experience with aero engines. The aim was the pursuit of power, Berthon talking of 500 bhp, a massive improvement over the 400 bhp enjoyed by Alfa Romeo, the pace setters of

the day. Reality would quickly overwhelm such illadvised ambition.

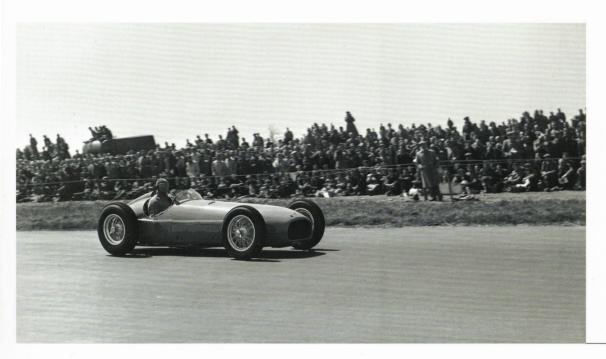
When push came to shove, many of the 350 suppliers were too busy sorting out their own problems to worry about a racing car being built in a shed in Lincolnshire. The delivery of parts ended up taking more than a year. By the time the BRM was close to completion in late 1949, the country's desire to see "our car" run matched the Trust committee's need to sample a return on their investment. Mays, calling for caution at such an early stage, was overruled. Thus, Thursday 15 December was set for a demonstration run on a nearby disused airfield.

Rather than cause the disappointment feared by Mays, his three laps of an improvised track literally stunned onlookers into a state of euphoria. The V16 engine made a colossal noise and the ground shook as the sleek and low BRM set off. Ironically, in view of what was to come during the next 12 months, the light green car ran beautifully. Members of the press immediately headed for the nearest telephone box to file stories claiming Britain had a world-beating car. Mays and Berthon, however, both knew that the work had barely begun.

When the FIA decided to instigate the FIA Formula One World Championship five months later at Silverstone, it only seemed natural that the BRM should be entered. Mays strongly - and wisely resisted the patriotic call but he could not find an excuse when asked to at least demonstrate the car. With the King and Queen present, it amounted to a sort of Royal Command Performance.

Happily, the BRM successfully completed a few laps and hopes were raised even higher when the King and Queen, accompanied by Princess Margaret, showed great interest in the British Racing Motor. Mays promised to have the car compete in the Daily Express International Trophy, a non-championship F1 race to be run at Silverstone three months later. The Daily Express, having noted the overwhelming public interest in motor racing, shrewdly aligned the newspaper with Silverstone and, along the way, agreed to assist in promoting a more attractive race-day package with a number of races for other categories. The planned appearance of the BRM also featured large in the pre-race feature material.

Mays, meanwhile, was a worried man. The V16 engine, when run for any length of time at speed,



Left: Raymond Mays demonstrates the BRM V16 at Silverstone on 13 May

had developed a habit of bending connecting rods thanks to its enormous power. The BRM's huge potential would be rendered impotent by this expensive and fundamental failure for which no immediate cure could be found. Mays wanted to withdraw the entry but, having heavily advertised the BRM's first race, the organisers were extremely keen to have it run. Even worse, as far as Mays was concerned, the Trust Committee had agreed with the Silverstone organisers. Outnumbered, a furious Mays had no alternative but to agree.

His team worked all night preparing the car. A Bristol freighter aircraft was dispatched to Cranwell in Lincolnshire and flew the car to Bicester, where it was loaded into a van and rushed to Silverstone under police escort. The expectancy had been cranked up further by the Daily Express producing a booklet entitled BRM. Ambassador for Britain. The story of Britain's Greatest Racing Car. The previous evening, the BBC had been presumptuous enough to broadcast a programme under the title British Achievement. The story of the BRM.

Raymond Sommer, a big-hearted Frenchman (he would need every ounce of his enthusiasm), had agreed to drive the BRM and managed a couple of laps to qualify for the back of the starting grid. The engine revved, the starter's flag dropped - and the BRM travelled no more than half a metre. A driveshaft had snapped; a totally unexpected failure due to the wrong specification of steel. Cheers from the

enclosures turned to jeers, some spectators cruelly tossing coins into the cockpit as the hobbled car was pushed into the paddock. Newspapers, having hyped the venture excessively, turned on BRM, one headline referring to the discredited team as "Blooming Rotten Motor". Mays was heartbroken.

The BRM would not appear again until a nonchampionship race at Goodwood later in the year. This time it held together, the experienced Reg Parnell winning two races of five and 12 laps respectively. This may have been a minor event and scarcely the technical challenge of a Grand Prix but, after all the hardship, it was a start. There would be further outings for the V16 but, as if the complexities of the 1.5-litre supercharged engine were not enough, it would eventually be made redundant when circumstances conspired in 1952 to have the World Championship run to Formula 2 specifications. In 1954, F1 returned with a step up to 2.5 litres, by which time the BRM management had changed and seen the light.

One of the staunchest and wisest of the project's initial supporters had been Alfred Owen, the boss of the Rubery Owen group manufacturing automobile parts. Owen eventually took over BRM in its entirety and set about restructuring its engineering base. The subsequent F1 cars became increasingly competitive, Moss describing the BRM P25 as being, "a bloody good car ... perhaps the finest front engine Formula 1 car ever built."



Above: Jo Bonnier (centre) and Tony Brooks (right) in the paddock at Zandvoort in 1959.

SAFETY LAST

Such was the hazardous nature of the sport that no less than five of the 11 BRM P25s built would be written off in various accidents. The most spectacular occurred during the 1959 German Grand Prix at Avus. If the Nürburgring was incredibly tortuous and difficult to learn, the track in the south-west district of Berlin was completely the opposite and a graphic indication of how Grand Prix circuits varied greatly in the Fifties. An extremely simple layout was dictated by two sides of an almost straight dual carriageway, linked at one end by a flat 180-degree turn and a banked brick-built curve at the other. Claimed to be "The World's Fastest Race Track", Avus would be used just once to host a round of the World Championship.

The entry to the flat turn consisted of a curve to the right, where the track departed from the dual carriage to begin its arcing 180-degree sweep to the left. Arriving at more than 170 mph, Hans Herrmann had brake failure on his BRM. Rather than attempt to start negotiating the curve, the German driver chose to aim for straw bales delineating the circuit at the point where the autobahn went straight on. Upon impact, the bales rolled up beneath the pale green car and launched it skywards before rolling, bouncing and somersaulting for some distance, shedding wheels and destroying itself in the process. The drivers of these front-engine cars sat comparatively high in open cockpits - which was just as well because

Herrmann was flung clear almost immediately before landing, virtually unhurt, on his hands and knees and looking over his shoulder in disbelief at the cavorting car. By the shocking death toll of the period, this was perhaps the luckiest escape of them all.

When the World Championship had begun nine years earlier, crash helmets were optional, many drivers preferring to wear close-fitting linen headgear that offered no protection whatsoever. The popular choice of dress for combat was no more than lightweight driving shoes, cotton trousers and short-sleeved polo shirts, the better to deal with the unremitting cockpit heat. Hard hats similar to the headgear worn by polo players became common, along with lightweight overalls, often supplied free by tyre and fuel companies in exchange for having a discreet logo on the breast pocket.

The word "safety" was scarcely mentioned. Motor racing was dangerous; it said as much on the warning notice, printed on the back of admission tickets as if a macho challenge to spectators. The effect of World War II still lingered insofar as taking on the obvious risks associated with a motor race was child's play for drivers whose forefathers had been regularly shot at during conflict of a more critical kind. Grand Prix racing was a cavalier sport embraced by all nations in harmony, as witnessed by Hans Herrmann racing a British car on his home territory.

BRM's long-awaited first win had come two months before in the Netherlands, when Joakim Bonnier of Sweden scored what would be his only Grand Prix victory. It had taken 10 years to realise a dream. Raymond Mays, who was present at Zandvoort that day, wept openly. Little did he realise there was better to come in the following decade. BRM had grown up - and so had Grand Prix racing.

> Right: The BRM P25 of Jo Bonnier leads into Tarzan corner at the start of the 1959 Dutch Grand Prix. Harry Schell aims his BRM (#6) down the inside of Masten Gregory's Cooper Climax, while the Ferrari (#2) of Tony Brooks takes the outside line.



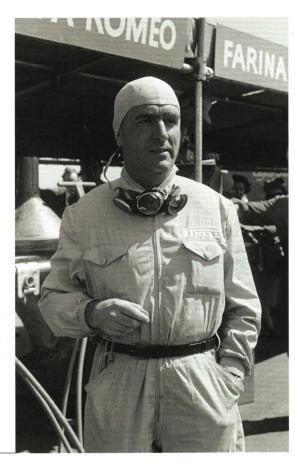
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Reports

Previous pages: Giuseppe Farina, Alfa Romeo 158, takes the chequered flag at the end of the 1950 British Grand Prix at Silverstone, the first-ever round of the FIA Formula One World Championship.

Right: Giuseppe Farina: the first FIA Formula 1 Drivers' World Champion after winning the British, Swiss and Italian Grands Prix in 1950.

Below: Alberto Ascari was almost untouchable for Ferrari on his way to claiming the 1952 World Championship. He remains Ferrari's only Italian champion.





"You must always strive to be the best, but you must never believe that you are." **Juan Manuel Fangio**

Right: José Froilán González from Argentina gave Ferrari a popular victory in the 1954 British Grand Prix at Silverstone.

Below: Juan Manuel Fangio leads his Mercedes team-mate, Stirling Moss, during the 1955 British Grand Prix at Aintree. Moss would never know if the Argentine driver allowed him to win at home.









Opposite: Alberto Ascari leads the similar Lancia D50 of Eugenio Castellotti during the 1955 Monaco Grand Prix. Ascari and his car would finish their race in the harbour, four days before the former World Champion was killed testing a Ferrari sports car at Monza.

Left: Tony Brooks, Tony Vandervell and Stirling Moss celebrate the first victory in a World Championship F1 race for a British car at the end of the 1957 British Grand Prix.

Below: Tony Brooks (left) hands over his Vanwall to Stirling Moss during the 1957 British Grand Prix to enable an all-British victory at Aintree.









Above: Luigi Musso prepares for the start of the Italian Grand Prix in his Ferrari at Monza, September 1957.

Right: Stuart Lewis-Evans chats to a Vanwall mechanic during practice for the 1958 British Grand Prix at Silverstone.

Previous pages: Juan Manuel Fangio takes the chequered flag in his Maserati 250F at the Nürburgring in 1957 at the end of what is considered to be one of the greatest drives of all time.





"They say every driver has a wish to drive part of their career with Ferrari and I was fortunate." **Tony Brooks**



Above left: Peter Collins (right) celebrates victory with team mate and friend, Mike Hawthorn, at the end of the 1958 British Grand Prix at Silverstone.

Left: Tony Brooks celebrates on the podium following his win at the 1958 German Grand Prix at the Nürburgring.

Following pages: Harry Schell presses on with his BRM P25 during the 1958 British Grand Prix at Silverstone. The marshals and officials on the right were protected only by straw bales.









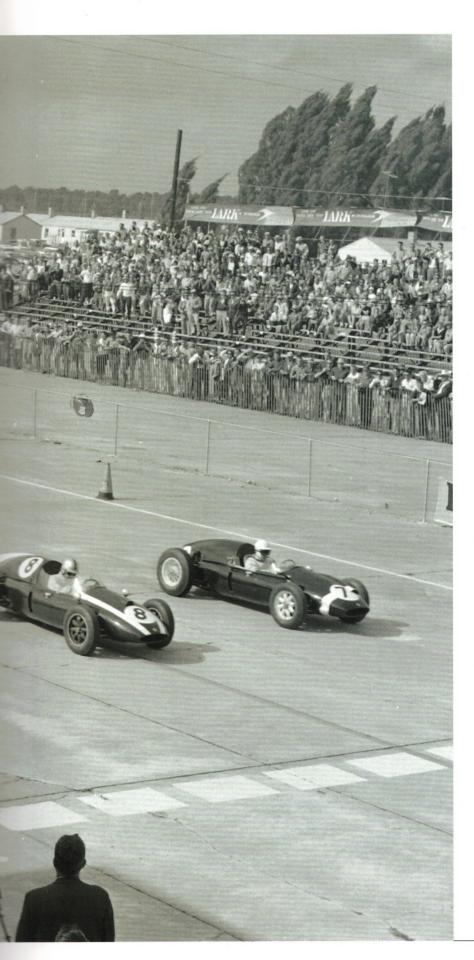
Opposite: Mike Hawthorn puts his Ferrari on pole for the 1958 Belgian Grand Prix, ultimately finishing second to the Vanwall of Tony Brooks.

Left: The picturesque and difficult Monsanto circuit outside Lisbon staged the Portuguese Grand Prix in 1959.

Below: Much of the Monaco circuit has remained unchanged over the decades. Jack Brabham tackles the climb to Casino Square in his Cooper in 1959.





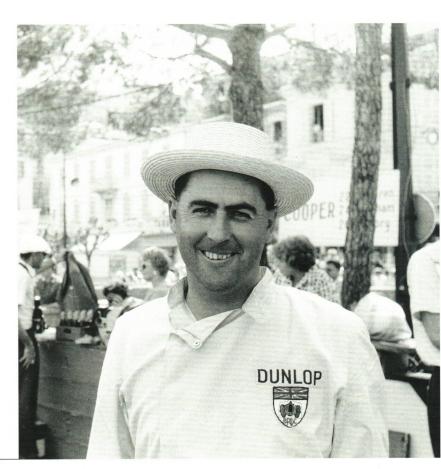


Left: Florida's Sebring airfield circuit staged the United States Grand Prix, and would settle the 1959 World Championship.

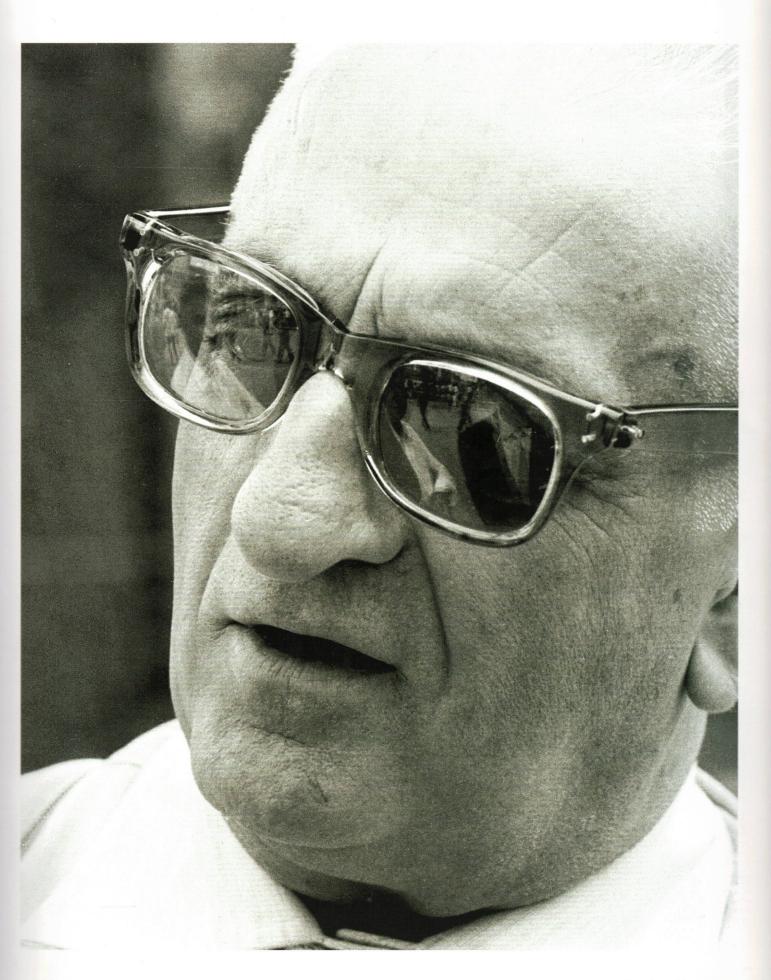
Opposite: Enzo Ferrari: one of the most powerful and enigmatic characters to grace Formula 1 across the early decades.

Right: Jack Brabham had reason to smile after topping the podium at the 1959 Monaco Grand Prix in Monte Carlo.

Below: In 1959, Bruce McLaren became the youngestever Grand Prix winner at the United States Grand Prix at Sebring, aged just 22 years, 3 months and 12 days. His record would stand for more than 40 years.









EDOSSONS BLOSSONS

Team Lotus was the dominant force of the decade and Jim Clark the driver to beat. Colin Chapman, the engineering and design genius behind Lotus, made the most of the rear-engine concept with a revolutionary method of making a stronger and lighter chassis and, later in the Sixties, introduced the Ford V8 that would make F1® viable for private entrants.





2. LOTUS BLOSSOMS

When Jack Brabham won a second successive World Championship in 1960, the Cooper Car Company remained ahead of the game. But as would be shown in subsequent decades, Formula 1 is about evolution just as much as revolution. Having pioneered the rear-engine concept, Cooper got left behind by the development rush that followed. Leading the charge would be a small but energetic company operating initially from the rear of a pub in north London.

Colin Chapman was the driving force behind Lotus. No mean driver himself, Chapman's fertile mind encouraged the belief that he could do even better in a car of his own creation. The first Lotus racing car, with an engine at the front and driven by Graham Hill, had made its Grand Prix debut at Monaco in 1958. The learning process from the back of the grid included making a note of the Cooper and being among the first to appreciate the performance benefits to be had, particularly when a Cooper won eight of the 13 Formula 1 races (including nonchampionship events) in 1959.

Chapman's ethos of a car needing to be light in order to be quick was met by the smaller frontal area afforded by having the engine in the back. Chapman reckoned that the profile would be reduced even further if the driver, rather than sitting in the traditional upright position, was as close to lying down as it was possible to be.

The Lotus 18 raced for the first time in Argentina in February 1960. Compared with Mike Hawthorn's championship-winning Ferrari of 1958 - in itself, a compact jewel of its day – the Lotus 18 was like a leopard alongside a lioness. But it was soon referred to - rather unkindly - as "a coffin on wheels"

thanks to its box-like appearance. The Lotus was undoubtedly fast, but it was also fragile – as proved early on in Buenos Aires when the leading car, driven by Innes Ireland, literally fell apart, leaving victory to Bruce McLaren's Cooper.

Stirling Moss, out of a drive following the withdrawal of Vanwall from motor racing, had opted to return to Rob Walker and race a Lotus 18 purchased by the private entrant. Revelling in the car's precise handling, Moss had given Lotus their first victory with a splendid drive at Monaco. But the fact that the engine mounts had broken and the Coventry-Climax 4-cylinder was hanging by a metaphorical thread should have provided a

Previous pages: Jim Clark was the man to beat throughout most of the Sixties.

Right: Phil Hill celebrates his first Grand Prix win at Monza in 1960.

Left: Stirling Moss drove a masterful race through the streets of Monte Carlo to win the 1961 Monaco Grand Prix in his privately-entered Lotus 18.



Right: Phil Hill shows off the distinctive lines of his 'Sharknose' Ferrari at Reims in 1961.

warning of what was to come on the super-fast Spa-Francorchamps road circuit in Belgium.

When the left-rear wheel parted company with his Lotus in the middle of a 140mph downhill curve, the resulting crash put Moss in hospital with a broken nose, broken legs and a crushed vertebra. It was to be the prelude to a shocking weekend. That was in practice; during the Grand Prix itself, the Englishman Alan Stacey was struck in the face by a bird, the Lotus driver losing control and crashing fatally. Chris Bristow was also killed when the Londoner went off the road in his Cooper during a fierce duel.

With Moss back to full fitness, Lotus (courtesy of Rob Walker) would win in the United States, which happened to be the final race of the 2.5-litre formula. To the disgust of the British teams, who felt it was a stitch-up by the French, the FIA had unilaterally announced a reduction of engine size to 1.5-litres for 1961. Moss led complaints that the comparatively gutless cars would make for unspectacular racing. There was talk of an alternative breakaway series for 3-litre cars. Enzo Ferrari didn't say much throughout this subversive dialogue. When his new car for 1961 was revealed, it was soon clear why.

All along, the crafty Italian had been busy preparing for the new formula, the Ferrari 156 taking the breath away with its sleek looks and distinctive twin-nostril front end that immediately earned the menacingly appropriate nickname "sharknose". The low-drag red car, with its V6 engine, may have been technically one

step ahead but that did not allow for another virtuoso performance from Moss – despite opposition from even closer to home than Ferrari.

For 1961, Lotus had produced the 21; an obvious choice for Moss and his entrant. Despite having his substantial chequebook at the ready, Rob Walker found the way to purchasing the latest Lotus barred, thanks to the increasing influence of trade sponsorship within the sport. The Lotus works team was contracted to Esso whereas BP supported Walker. It was a thorny tribute to Stirling's talent that Esso, already frustrated by the two Grands Prix victories for Lotus having been scored by Moss in a car fuelled by their rival, blocked the supply of a 21 to Walker's race team.

If anything, it motivated Moss even more on the streets of Monaco where the driver's contribution could match if not surpass that of his car. Moss duly put the elderly Lotus on pole position. Not long before the start, however, all that effort appeared to have been in vain when one of the car's chassis tubes was found to be cracked.

Unlike today, when mechanics replace broken or damaged parts as a matter of course, their forbearers, fashioned by budget and practicality, would mend and make-do as they relished the challenge of repairing the seemingly unfixable. Without a second thought, Moss's mechanic – the *only* mechanic on the Walker team – produced his welding kit and set to work on the starting grid, his torch inches from a fuel tank



Left: Giancarlo Baghetti made an extraordinary debut when he won his first three Formula 1 races, including the French Grand Prix, where he lead the Lotus 21 of Jim Clark.

brim full with 30 gallons of BP. Such risky work would pay off as Moss, with the car's side panels removed to assist cooling in the cockpit, withstood relentless pressure from the more powerful if less nimble Ferraris. Moss would later describe it as one of the most satisfying wins of his career.

The script returned to its anticipated theme in the Netherlands where Wolfgang von Trips, still driving for Ferrari, became the first German to win a championship Grand Prix since 1939. It was also a significant race insofar as all 15 starters finished and not one of them made a pit stop.

AN EXTRAORDINARY DEBUT

The reduction in engine size meant that Formula 2 had more or less become redundant, owners of these small capacity cars taking the opportunity to enter the proliferation of non-championship F1 races. The calendar became so crowded that clashes with World Championship Grands Prix were inevitable. One such was the Naples Grand Prix, held on the same day as the Championship race at Monaco.

While Ferrari may have been humiliated by the brilliance of Moss, there was salvation of sorts when Giancarlo Baghetti, driving a Ferrari sharknose entered by an Italian consortium, won in Naples. This was his second win in succession (the Syracuse Grand Prix having marked an F1 debut victory) but when the young Milanese driver was given a car for the French

Grand Prix, he was expected to play no more than a supporting role to von Trips and the Americans, Phil Hill and Richie Ginther.

Baghetti held a watching brief as the three works cars ran line astern at the front. In a surprising turn of events, however, all three retired, leaving the Porsche of Dan Gurney in the lead. On the final lap, calm as you like, Baghetti slipstreamed the American, pulled out and won by a tenth of a second. Three wins in a row the third on his World Championship debut - was an incredible start by any standard.

English motor sport correspondents suddenly had to find out who this man was as they prepared previews for the next World Championship Grand Prix at Aintree. The British summer weather would burst Baghetti's bubble. The hapless Italian, not coping with pouring rain on an unfamiliar circuit, crashed at the appropriately named Waterways Corner, just as he was about to be lapped by the leader, von Trips.

Ferrari finished 1-2-3 with no one else getting a look in. By the time the season had reached its seventh and penultimate round at Monza in September, the championship had become a straight fight between von Trips and Hill. Against gloomy predictions, the 1.5 litre formula had provided close racing and a continuation was anticipated on the highspeed circuit. The championship, in fact, would reach a terrible conclusion on the first lap.

Von Trips collided with another car on the flatout back straight, the Ferrari spearing off the track,



Right: The remains of Stirling Moss's Lotus-Climax after the crash at Goodwood that ended his competition career on Easter Monday 1962.

careering up a grass bank and colliding with a fence post before cannoning off the flimsy spectator fence itself. Von Trips was killed, along with 14 spectators. Hill won the race. He may have become the first American World Champion, but the accolade would mean little to such a thoughtful and sensitive man in the face of great tragedy.

BRILLIANCE CURTAILED

Stirling Moss was voted BBC Sports Personality of the Year. He was at the peak of his powers, racing whatever he could, whenever he could. On his return from the Tasman Series (a championship in Australasia during the Northern Hemisphere winter), it almost went without saying that Moss would take part in the Easter meeting at Goodwood; a traditional prelude to the European season.

Moss put his Lotus on pole. It was also no surprise when he broke the lap record as he made a comeback following a pit stop to attend to a broken gear linkage on Rob Walker's car. Having worked his way up to seventh place, Moss went straight on at a fast curve and crashed into a bank. Badly injured and concussed, he survived the impact. But the racing career of arguably the greatest driver never to win the World Championship had ended right there. It was never established how or why he left the road at that point on a circuit he knew like the back of his hand.

The accident, its aftermath and Moss's future was the subject of media conjecture for weeks. Britain suddenly appeared to be without a motor sport star. But not for long. During the Tasman Series, Moss had come to recognise the emerging qualities of greatness in a diffident farmer from the Scottish Borders.

Colin Chapman couldn't fail to notice Jim Clark when the Scot turned up at Brands Hatch – a circuit Clark had never seen before – and almost beat Chapman as they raced a pair of Lotus Elite sportscars. Chapman would be responsible for giving Clark his F1 debut in 1960 after a period racing for Lotus in the junior formulae. When Clark held an impressive fourth place at Zandvoort before the car let him down, Chapman knew he had someone special on his hands. More Grands Prix followed and the partnership took a major step forward in 1962 when Chapman played his part at the drawing board.

The Lotus 25 would elevate F1 standards thanks to a monocoque chassis that did away with the traditional tube frame construction by providing the basic element of a car that was lighter and stronger. The Lotus 25 first appeared at the Dutch Grand Prix. There had been no time for testing and yet Clark led easily for several laps until clutch trouble intervened.

The Lotus came into its own at Spa, Clark winning the first of four Grands Prix at a circuit he detested (a throw-back to the awful weekend he witnessed at the Belgian track two years before.) The success continued at Aintree where Clark was fastest in

Opposite: Jim Clark began to set a benchmark with the Lotus 25 in 1962. The Scotsman is on his way to the first of four victories in the Belgian Grand Prix at Spa-Francorchamps.





Right: A win for Graham Hill at Monza in 1962 would help the BRM driver towards the first of three world titles.

practice by more than half a second and left the field standing in what would quickly become a tedious race. Meanwhile, another Brit with a trim moustache was stepping up to the championship plate with some stirring drives.

Graham Hill was a late starter. He had never driven a car – any car – until just before his 24th birthday. Having got the taste for motoring, he moved quickly in every sense. A few laps at a racing school sowed competitive seeds that grew when he talked his way into the fledgling Lotus team and doing enough to be noticed by BRM for 1960.

The team from Lincolnshire had progressed from the well-meaning outfit that had allowed ambition to exceed common sense during those embarrassing days at the start of the Fifties. That said, it took BRM a while to find their feet at the start the 1.5-litre formula but, by 1962, they were seriously competitive.

Hill won his first Grand Prix in the Netherlands and followed this up with a brilliant victory in the wet at the Nürburgring. Clark had forgotten to switch on his fuel pump at the start (an impossible gaffe today thanks to the computerised checks and balances), the loss of a possible win that day being exacerbated by technical problems at Monza as Hill led home a BRM one-two. By the time the season reached its final round in South Africa on 29 December, Clark had only an outside chance of beating Hill to the title. To do it, he would need to win at the Prince George circuit in East London.

The Lotus led for 59 of the 82 laps. Then a retaining bolt on the distributor drive housing worked loose, allowing oil to escape. Two laps later, Clark's race was over and Hill secured the 1962 championship with his fourth Grand Prix victory of the season. BRM had won the Constructors' Championship (instigated in 1958) thanks, in part, to excellent reliability. The shambles of 1950 did indeed seem from another age.

RULE BRITANNIA

The landscape had changed in many ways. British drivers had won no fewer than eight of the nine Grands Prix, with a Scot and an Englishman disputing the title. It was little wonder outrage had been expressed in the correspondence columns of the motoring press when BBC Radio saw fit to offer just 10 minutes of commentary from the final race in South Africa. Two Britons fighting exclusively for the championship today would trigger wall-to-wall analysis, commentary and comment across every conceivable media platform.

Had those outlets been around in 1963, they would have airing claims that the season was boring as Clark and Lotus annihilated the opposition. *Autosport* summed it up in the first week of July when the magazine's front cover depicted the opening seconds of the French Grand Prix at Reims. As the field charged towards the first corner, Clark had already pulled a couple of lengths ahead, never to be seen again by the opposition – unless they were being lapped, which



Left: The British Grand Prix was held at Brands Hatch for the first time in 1964. The Lotus-Climax of Jim Clark (front row, left) led from start to finish. There was chaos at the back when one car was slow to get away and others collided while trying to take avoiding action.

was the case for all but four of the remaining 18 starters. Victory in France made it three in a row for Clark as the scene shifted to Silverstone.

What should have been a happy event in the days of such British dominance would have a cloud descend upon it with an incident that was indicative of the continuing absence of thought about safety in such a potentially dangerous sport. During a supporting race for sports and GT cars on the morning of the Grand Prix, an Austin Healey Sprite spun out of control at the exit of the final corner, Woodcote. The car careered into the pit road (then without any protection whatsoever) and fatally injured an official who, ironically, was on his way to investigate spilled oil that had probably contributed to the car going out of control in the first place.

Victory for Clark at Silverstone was the fourth of his seven wins, ensuring the 27-year-old would claim his first World Championship. More of the same seemed likely in 1964. But that did not allow for the rise of a remarkable competitor who had already swept the board on two wheels.

Clark knew all about John Surtees, A World Champion on motorbikes several times over, Surtees decided to try his hand at motor racing. Despite having no knowledge of Goodwood - or four-wheel racing in general - "Il Grande John" (as he was affectionately known in Italy) turned up at the Sussex circuit, qualified on the front row and finished second to Clark in a Formula Junior race.

Within two months, the wily Colin Chapman had given Surtees his first Grand Prix drive - and a couple of months after that, John found himself on the podium at Silverstone after finishing third in his home Grand Prix. Indeed, he might have completed his spectacular rise by winning in Portugal later in the year but for his foot slipping off a brake pedal made slippery by a fuel leak.

Surtees had attracted the attention of Enzo Ferrari, but the oft-outspoken Englishman had the temerity to turn down such a sought-after seat because he didn't feel the time was right. It was a sign of Surtees's potential that Ferrari made the rare concession of offering a second invitation – which was duly accepted and capitalised on as John won his first Grand Prix in Germany in August, one of only three that hadn't gone to Clark in 1963. They would find themselves part of a three-way fight for the Championship going into the final race of 1964, held inside a suburban Mexico City municipal park. It would be a truly dramatic shoot out.

Graham Hill was favourite, as he was ahead on points (awarded 9-6-4-3-2-1 for the first six finishers, only the six best results counting), so would be crowned if he won or came second; Clark had to win with Surtees third or worse and Hill not in the first three; John would be champion if he won and Graham was outside the points.

Clark assumed a familiar position on pole and Hill appeared to do himself no favours with a place on





Left: Jim Clark shares the podium with Graham Hill (left) and Dan Gurney after a win in the 1965 German Grand Prix that would go towards the Scotsman's second World Championship.

the third row. Such a comparative disadvantage was compounded further when Hill's goggles came adrift and he was still fiddling with them - with the car in neutral - when the starter's flag fell.

With jaw set and moustache bristling, the Londoner immediately set about recovering from 10th and worked his way into third - which was just where he needed to be to win the championship, despite Clark pulling out a decent lead. Surtees, struggling with a misfire, was sixth; but unintentional help was at hand, courtesy of his team-mate in fourth place.

Lorenzo Bandini, in his first full season for Ferrari, was keen to make an impression, which is exactly what he did when he misjudged his braking and collided with the rear of Hill's BRM, spinning the green car backwards into the barrier and damaging its exhausts.

Such an incident today would set social media on fire within seconds. In 1964, and knowing Bandini's graceful nature, Hill would later interpret the move as nothing other than a misjudgement. Hill limped back to the pits where the BRM mechanics attacked the damaged rear end with crowbars (no time for subtlety with a championship at stake!), wrenching off part of the exhaust and sending their man on his way. With the BRM down on power, Hill's chances looked slim, particularly if Clark stayed out front.

Going into the final laps, Clark idly wondered who was dropping oil on the racing line and took action

to avoid it. On the next lap, his heart skipped a beat when he noticed the trail of oil was now following his new line. He was the culprit. A low pressure rubber hose serving a scavenge pump had split. Soon, there would be no oil remaining to be spilled.

Crossing the line to start his final lap, Clark could only raise both hands towards his team, as if pleading with fate to see him through the next three miles. Seconds later, the Coventry-Climax V8 seized, just as his second World Championship was within touching distance.

This left the Brabham of Dan Gurney in the lead, followed by Bandini and Surtees. If these positions remained the same, Hill would become champion, but if Surtees could finish second, the title would be his. It took only seconds for the Ferrari team to work this out once they had seen Clark crawl past the pits to start his final lap. The problem would be communicating the news to Bandini as he came by.

By all accounts, it resembled a scene from a Keystone Cops movie as the entire team tumbled onto the track (not frowned upon in those days) and gesticulated wildly to Bandini, imploring him to slow down, stop - if necessary - do anything but finish second. Bandini got the message and allowed Surtees to pass and thus become the first - and, in all likelihood, the only - man to win championships on two wheels and four. It had been an eventful season, made notable by the introduction of a new venue to the Grand Prix schedule.

Opposite: John Surtees became the only man to have won World Championships on two wheels and four when he claimed the F1 title with Ferrari in 1964.



Right: The young bloods of 1965; Jackie Stewart (left) learned the F1 ropes alongside Graham Hill at BRM while Denny Hulme (right) was Number 2 in Jack Brabham's team.

BRANDS HATCHING

In the same year that the World Championship kicked off at Silverstone, a much lower profile event had taken place in a natural bowl, just off the A20 London-Maidstone road. Motorcycle grass track enthusiasts had previously laid out a kidney-shaped track which, after World War II, came to the attention of amateur car racers. They clubbed together to pay for a permanent surface to be laid down. Known as Brands Hatch, the circuit staged its first motor race on Sunday 16 April 1950. The now defunct Daily Graphic newspaper titled their report "Suicidal Car Speeds Thrilled Race Fans".

Sensational headline aside, spectators appreciated the excellent viewing in an amphitheatre that allowed sight of the entire one-mile track. Inevitably, the need for a longer circuit led to permission being granted in 1960 for an extension. The result was a 2.65-mile undulating layout that was perfect for Formula 1. The purchase of Brands Hatch by an investment company brought a successful application to stage a Grand Prix in 1964.

No sooner had details been released than the correspondence columns were carrying the now familiar complaints about prices. It was noted that a family of four would need to pay £10 for admission plus a programme, which was £2 10s (£2.50), more than Silverstone had charged in 1963. Just as predictably, Brands Hatch responded with details of



their £100,000 investment including restaurants, bars and permanent facilities. Whatever the cost, the race - carrying the additional accolade of Grand Prix of Europe, a nominal title awarded on the whim of the FIA - was sold out.

Although the Grand Prix itself turned out to be a walkover for Clark, the fans had been royally entertained during a sports car race earlier in the day. Confusion had been caused when a front-row starter was withdrawn. The man on the second row, Jack Sears, then assumed he could move his AC Cobra forward to fill the vacant spot. Officials decided this was not allowed – but only after the race had started. When called into the pits to be admonished, Sears, normally the most mild-mannered of men, was incensed and left trails of rubber as he booted the powerful V8 back onto the track. Just for good measure, the car's entrant and owner, an equally outraged man of muscular build, felled the Clerk of the Course with a single blow. Sears drove like as man possessed. The crowd rose as one when he eventually took the lead from a Jaguar E-type with a few laps to go. The hapless driver of the E-type was Jackie Stewart.

If Jim Clark was of a slight build, Jackie Stewart was even smaller. As it turned out, Stewart would happily confess to being in the shadow of his fellowcountryman, if only because he so admired Clark's effortless ability to drive so quickly. To be fair, Stewart was doing himself down. His pedigree as a junior



Left: Denny Hulme corrects a slide in his Brabham-Repco while holding off the Ferrari of Chris Amon during the 1967 Dutch Grand Prix at Zandvoort.

driver had been even more impressive than Clark's. Recommended for a test drive with Ken Tyrrell's Formula 3 team, Stewart was immediately signed on the strength of his performance at Goodwood as he produced lap times better than the mark set by Bruce McLaren in the same car. Tyrrell's faith would be rewarded when Stewart won all but two races in a major British Formula 3 Championship in 1964.

Proof of Stewart's shrewdness came when he turned down Lotus's offer of an F1 drive in 1965. Rather than draw direct comparison with Clark, Stewart chose instead to partner and learn from Graham Hill at BRM. This added further interest to the new season as Lotus and Clark also appeared to be coming under threat from Brabham, a comparatively new F1 team set up by the former World Champion.

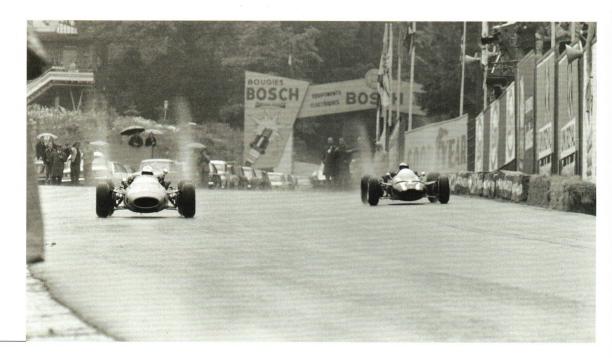
THE CAR THAT JACK BUILT

Having decided to move on from Cooper and plough his own technical furrow, Jack Brabham had entered his first F1 car in the 1962 German Grand Prix. This was, in effect, the flagship for a thriving business as Brabham reached an annual production of 80 cars for the junior formulae. As he focussed on his company, Jack was content to be the number 2 in his Grand Prix team, particularly with Dan Gurney as the regular driver and Denny Hulme, a promising New Zealander, backing up the American.

As it turned out, the team did not win any Grands Prix in 1965. Clark took six of the 10 races to become champion for a second time and, in the process, sign off the 1.5-litre formula. Contrary to the belief of detractors making a fuss five years earlier, the 1.5-litre cars had produced some excellent racing, with the British teams coming out on top. But what of the future?

Engine size would double for 1966, the so-called "return to power" being seen as an exciting way forward with 3-litre cars. Once again, however, there seemed a reluctance by teams to make the change, Brabham going so far as to say he had no plans to continue in F1 because suitable engines were not available. If nothing else, the shrewd Australian had learned a thing or two from Enzo Ferrari's apparent inability to have a 1.5-litre car ready for 1961.

In between making his gloomy pronouncements, Brabham had flown home to visit a company noted for manufacturing automotive components under the "Repco" brand name. Jack knew Repco had developed a racing engine based on an Oldsmobile V8 for the Tasman Series. Attracted by the simplicity and proven qualities of the American engine, Brabham persuaded Repco to make a 3-litre version for F1. Another important strand of his judgement would rely on rivals either being ill prepared or choosing to make engines that were far too complicated. He would be proved correct on both counts.



Right: Jochen Rindt laps the similar Cooper-Maserati of Guy Ligier (left) during the wet and hazardous 1966 Belgian Grand Prix at Spa-Francorchamps.

Ferrari couldn't decide between a V8 and a V12, the cumbersome Maserati V12 chosen by Cooper was gutless and BRM appeared to have learned nothing from their early days by designing a complex 16-cylinder motor that was so heavy, thirsty and unreliable that Stewart and Hill had to rely on the tried and trusted V8 for the majority of the season. The smaller BRM, in fact, would be ideally suited to Monaco as Stewart took his second Grand Prix win to back up his maiden victory at Monza the year before. But the Monte Carlo result was considered a one-off, particularly when Ferrari appeared to be getting into their stride as the V12 finally stretched its legs to give Surtees an imperious win at Spa. The race, however, would have a far-reaching effect that would go beyond the outcome of the championship in 1966.

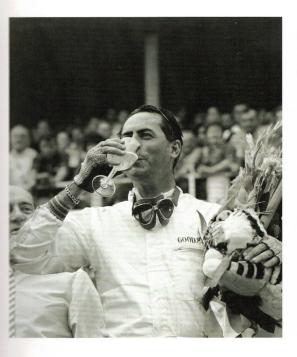
A SCARY LESSON IN SAFETY

The Belgian Grand Prix had started in the dry.
But such was the length of the Spa circuit that it immediately climbed a steep hill and disappeared over the other side, sweeping through very fast curves towards the town of Stavelot. The drivers were flat out on that section when the road quickly changed from dry to damp – and then streaming conditions as the 16 starters ran slap-bang into a downpour. There had been a warning on the starting grid – but it was in French and Surtees was the only

driver to hear the commentator mention that rain had begun to fall at Malmedy, halfway to Stavelot. From his experience racing motorcycles at Spa, Surtees had an inkling of what to expect. The rest had no idea.

Cars spun in all directions, Stewart's BRM landing in a ditch, the Scotsman trapped and soaked in fuel. It took two other drivers to come to his aid, borrow a spanner from a spectator's car and remove the steering wheel snaring their rival in the BRM's bent cockpit. Stewart's troubles did not end there as he and his rescuers found a complete absence of medical facilities to begin dealing with petrol burns, a broken shoulder and a cracked rib. When an ambulance finally picked up Stewart, it got lost – twice – trying to find the nearest hospital. The woeful lack of support for a driver in trouble would trigger a relentless safety campaign, Stewart disregarding widespread criticism from the sport's "old guard" as he effectively laid the groundwork for the rigorous safety values in evidence today.

Having reached the ripe old age of 40, Jack
Brabham wore a false beard and used a walking
stick to hobble theatrically onto the starting grid
at Zandvoort. Casting his props aside, Brabham
proceeded to show there was life in the old dog yet
by leading every lap – just as he had done a few
weeks earlier in the British Grand Prix at Brands
Hatch. The Netherlands, in fact, was his third win in
succession, Brabham having made history at Reims





to become the first man to win a Grand Prix in a car bearing his own name.

Apart from proving his theory that a simple and reliable engine – not necessarily the most powerful one – was the way forward at the dawn of a new age, Brabham's consistency would bring a third World Championship. Along the way, Jack had taken great satisfaction from dismissing the suggestion that he was merely profiting from the misfortune of others by scoring a classy win in the wet at the potentially treacherous Nürburgring Nordschleife.

Brabham had more than made do with a hefty piece of Detroit iron in the back of his car.

Meanwhile, the competition was closing in courtesy of a fine piece of British craftsmanship, courtesy of Cosworth Engineering in Northampton and inspired by none other than Colin Chapman. In 1967, the combination of the Cosworth engine in one of Chapman's creations would have a profound effect on the future of Grand Prix racing.

OFF-THE-SHELF WINNER

As Director of Public Affairs at Ford of Britain, Walter Hayes was an influential and perceptive man. When Chapman invited Hayes to dinner and expounded his wiews on the need for a 3-litre Grand Prix engine, the Lotus boss knew that Ford were in the process of polishing a rather dowdy image. Hayes immediately

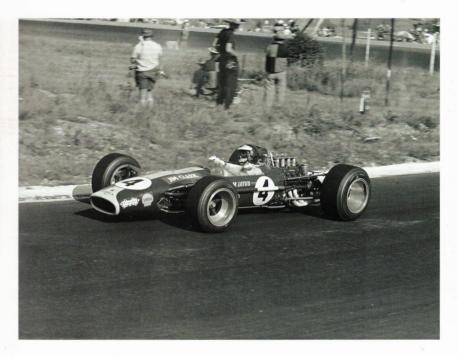
saw the benefit of Ford being involved at the sharp end of motor sport. Thanks to shrewd lobbying and political manoeuvring, Hayes got Ford to agree to commit a minimum of £100,000 towards an engine which would be designed and manufactured by Cosworth Engineering, run by Keith Duckworth and Mike Costin.

Duckworth was not swayed by the F1 trend to build multi-cylinder engines. He was more impressed by the simple effectiveness of Brabham's Repco V8, which was also lighter and more fuel-efficient. He set to work on an engine to be known as the Ford-Cosworth DFV, while Chapman and his team got on with designing a car to accept the V8. The result, the Lotus 49, made its debut at Zandvoort for the third round of the 1967 season – and won it.

The new engine had not been the only addition at Lotus. After seven years with BRM, Graham Hill switched sides and had no doubt about the wisdom of his move when he put the Lotus 49 on pole at Zandvoort with a lap that was an astonishing 6.2 seconds inside the previous record. Hill led for 11 laps before a camshaft drive failed. Jim Clark, who had never sat in the car before the weekend in the Netherlands, gradually moved forward as he felt increasingly at home in the Lotus 49 and took the lead, one which he would not lose. It was the first of more than 150 victories for an engine that would be the mainstay of F1 for a decade and more.

Above: Keith Duckworth, Colin Chapman, Jim Clark and Graham Hill pose alongside the trendsetting Lotus-Ford 49 on its debut at Zandvoort in 1967.

Top left: Jack Brabham takes a well-deserved sip of Champagne at Reims in 1966 after becoming the first man to win a Grand Prix in a car bearing his own name.





Above: Jim Clark heads for what would be the Lotus driver's final victory in the 1968 South African Grand Prix, three months before he would killed in a F2 race at Hockenheim.

Top right: Ken Tyrrell and Jackie Stewart made a formidable combination.

WINNER FROM A WOOD YARD

Ken Tyrrell was an interested spectator at Zandvoort that weekend. The timber merchant and race team owner knew that Lotus had exclusive use of the DFV for 1967, after which it would go on general sale for £7,500. More convinced than ever that he wanted to move from Formula 2 to Formula 1, Tyrrell returned home and immediately ordered three DFVs. How he would pay for the engines, which car he would put them in and who would drive it were details that would be sorted later. The one clear thing was that this engine was the future for private entrants such as him.

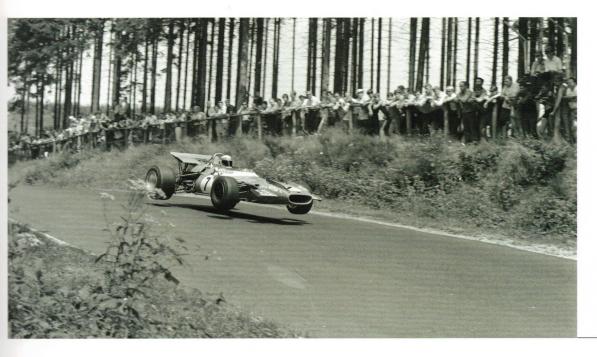
In the meantime, teething problems for the Lotus 49 and its engine would limit Clark to three more wins and deny him a chance in a championship that would ultimately be won by the consistency of the Brabham-Repco driven by Denny Hulme. Few were in doubt, however, that the Ford-Cosworth DFV would power the championship-winning car in 1968. And Tyrrell had every intention of making absolutely sure it was an entry coming from a shed in his wood yard in Surrey.

From the moment his F1 plan had begun to gather strength, Tyrrell had no doubt about who should supply the chassis. While racing in F2 and F3, Ken had been introduced to a leading light from Matra, the French aerospace company that was keen on using motor sport as a means of demonstrating

its skill. Jackie Stewart, who had continued to race for Tyrrell in F2, had been extremely impressed by the rigidity and integrity of a chassis that employed aero-technology.

Matra had plans to build their own car and V12 engine for F1 but could see the sense in having a second string to their bow with a chassis powered by the Ford-Cosworth DFV. When Tyrrell said he could persuade Stewart to move from BRM after three disappointing seasons, it was a done deal. Stewart agreed to a fee of £20,000 (lent to Tyrrell by Walter Hayes). There was no written contract, Stewart and Tyrrell cementing the arrangement on a handshake. Together, they would win three races in 1968 and be in the running at the final race for a championship that ultimately went to Graham Hill and Lotus. This was an achievement that had a deep emotional undertone based on an event that had shaken the motor sport world to its roots seven months before.

When reports filtered through that Jim Clark had been killed at Hockenheim, there was disbelief. Where was Hockenheim, anyway? And what was the two-time World Champion doing there? Wasn't he supposed to be racing in the BOAC 500 at Brands Hatch, Britain's round of the world sportscar championship? A late switch, for contractual reasons, to the Formula 2 race at Hockenheim meant Clark was holding a distant eighth place when, for reasons that were never clear, he left the road on a gentle curve. There were no crash



Left: Jackie Stewart and the Matra-Ford MS80, pictured on one of the many jumps on the Nürburgring Nordschleife, would win the championship in 1969.

barriers of any description. Clark slammed sideways into a tree that tore the Lotus in two and killed the Scotsman instantly.

Drivers wept when news spread along the pit lane at Brands Hatch. Even in an era when death continued to be such a desperate and inevitable part of the sport, this was impossible to comprehend. Clark, who found driving so easy, seemed indestructible. Everyone in the sport had suddenly become vulnerable to its destructive ways.

Colin Chapman and his team were distraught over the loss of the gentle, shy man they loved. It took someone of Graham Hill's steely nature to help hold them together as the season marched relentlessly on - as it always does. Hill not only won the next Grand Prix in Spain, he produced another exemplary performance to become a four-time winner at Monaco, the points making a vital contribution to his second World Championship at the season's end.

AN EXEMPLARY DISPLAY

Apart from the loss of Clark, it had been a desperate year, three other F1 drivers being killed (two of them in divisions of the sport outside Grand Prix racing). It was a nervous time, made spooky when these fatal accidents happened on or near the seventh day of successive months at the start of that long summer. The unspoken sense of foreboding can be imagined with the German Grand Prix falling on August 4,

particularly when the Nürburgring Nordschleife, scary at the best of times, was cloaked in mist and rain. There was, of course, no question of the race being either cancelled or postponed.

Jackie Stewart may have been unfairly branded a wimp because of his unremitting campaign to make motor racing safer but the Scotsman was to put on a display of fortitude and skill that would silence his critics for good. On a circuit awash from one end of its 14 miles to the other, with rivers of water suddenly appearing between one lap and the next, Stewart left the opposition standing. He won by four minutes. By the time the third-place man had crossed the line, the Tyrrell driver was waiting on the podium.

Having failed to win the championship that year, Stewart made sure of it in 1969, scoring almost twice as many points as anyone else in the latest Matra-Ford, later described by Stewart as the car he loved the most. But this was not before the Matra, along with every F1 car, had sprouted wings to dramatically signal the arrival of aerodynamics as a defining - and sometimes treacherous - force in the fast-moving world of Grand Prix racing.







Above: Jim Clark (left) celebrates victory in the 1962 Belgian Grand Prix ahead of Graham Hill and Phil Hill (right).

Left: Phil Hill's Ferrari 156 tackles the bumpy and steep banking at Monza during the 1961 Italian Grand Prix.



Above: Graham Hill and BRM won the 1962 World Championship in East London after Jim Clark retired from the South African Grand Prix.

Right: John Surtees leads team-mate Lorenzo Bandini during the 1964 Mexican Grand Prix, the race in which Surtees would clinch the World Championship. Their cars were painted in the blue and white racing colours of the USA and entered by the North American Racing Team, Ferrari eschewing Italian red as a political statement at the time.

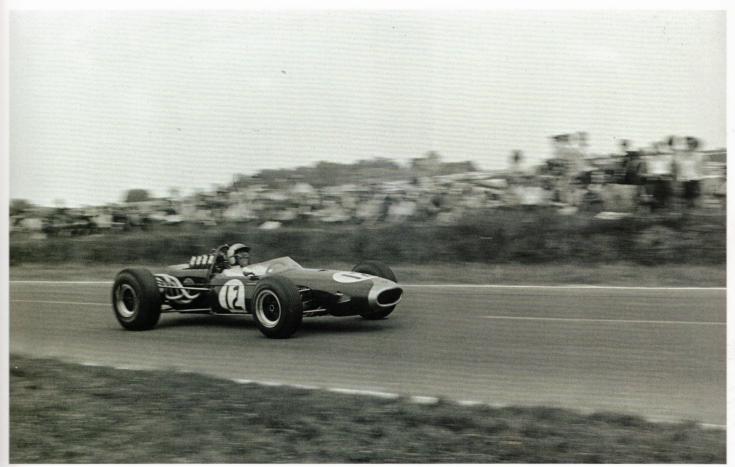


"When I won in South Africa, I particularly remember the laurel wreath - it looked rather like a privet hedge round my neck, right down to my feet" **Graham Hill**

Right: Jim Clark dominated the championship in 1965. His Lotus-Climax leads the Cooper-Climax of Bruce McLaren during the Mexican Grand Prix.

Below: Jack Brabham stole a march on his rivals when the engine formula changed in 1966 by designing a car powered by a relatively straightforward Repco V8.









Above: Denny Hulme won his first Grand Prix at Monaco in 1967, the year the Brabham driver became World Champion.

Right: Chris Amon: led many, but never won a Grand Prix.





Above: Following the death of Jim Clark, Graham Hill lifted the Lotus team in May 1968 with a fine win at Monaco.

Following pages: The BRM of Piers Courage passes the burnt-out wreckage of Jo Schlesser's Honda during the French Grand Prix at Rouen. The Frenchman was one of four leading drivers to lose his life in 1968.

Left: Taking the distinctive orange of his team to the front, Bruce McLaren won a Grand Prix in his own car for the first time in the 1968 Belgian Grand Prix at Spa-Francorchamps.











Previous pages: Jo Siffert took a popular win in Rob Walker's privately-entered Lotus 49 in the 1968 British Grand Prix at Brands Hatch.

Opposite: The Lotus-Ford of Mario Andretti (left) holds off Bruce McLaren's McLaren-Ford during the 1969 South African Grand Prix.

Left: Arguably the most talented F1 driver never to win a Grand Prix, Chris Amon was leading the 1968 Canadian Grand Prix comfortably when his Ferrari's transmission failed after 73 laps.

Below: High aerofoils in evidence as the field storms off the grid at the 1968 Canadian Grand Prix at Mont-Tremblant.









Opposite, Left & Below: A ban on high rear wings was hastened during the 1969 Spanish Grand Prix at Barcelona when failures caused both Lotus drivers to crash. Graham Hill (left) climbs from his damaged car (opposite) shortly before Jochen Rindt had an identical breakage at the same spot on the Montjuich Park track (below). Officials bundled both wrecks over the crash barrier while the race continued.

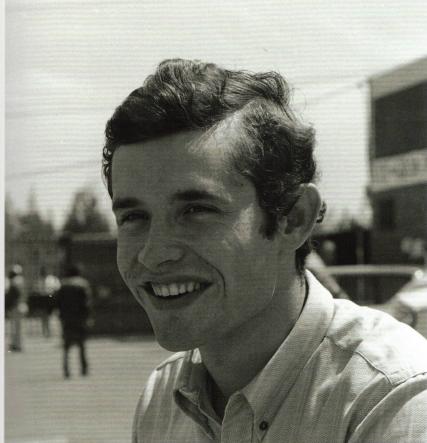






Left & Above: An epic battle between the Matra MS80 of Jackie Stewart and Jochen Rindt's Lotus 49 at Silverstone (left) saw victory in the 1969 British Grand Prix go to Stewart (above).





Above: Jackie Stewart's Matra-Ford leads the field during the 1969 Italian Grand Prix at Monza, where the fast straights led to dramatic slip-streaming battles.

Left: Victories for Ferrari in the 1969 German and Canadian Grands Prix helped Jacky Ickx into the championship runnerup spot.





Left: Jochen Rindt retired from the 1969 Mexican Grand Prix, but the Austrian would go on to use the Lotus 49 to spectacular effect in 1970 when he won the Monaco Grand Prix at the final corner.



ONAWING ANDA PRAYER

Jackie Stewart's retirement from the very top at the end of 1973 typified a decade of change. Emerson Fittipaldi emerged and Niki Lauda and Ferrari came to the fore, followed by the arrival of 'ground effect', Colin Chapman's latest creation changing F1® design thinking once more.







3. ON A WING AND A PRAYER

Bruce McLaren frequently used Goodwood for testing. Having followed in the steps of Jack Brabham and left Cooper to form his own team, McLaren used a similar combination of engineering and driver skill to help define his race cars. While driving his latest sports car on the Sussex circuit, Bruce made an intriguing discovery.

A small hatch had been placed in the nose of the McLaren to allow access to master cylinders containing hydraulic fluid. Returning to the track following a visit to the pits, McLaren discovered that the hatch, which was hinged on its leading edge, had not been closed properly. He was amazed to see that, rather than being blown shut by air passing over the front bodywork, the faster he went, the higher the flap lifted.

McLaren immediately realised this apparent defiance of logic was due to low pressure on top of the nose and high pressure beneath. His mechanics were nonplussed when he returned to the pits, asked for a pair of snips and began hacking an even bigger opening around three sides of the hatch. From the moment he rejoined the track, McLaren found the car was running faster and cooler, and the flap had stopped rising. It was a "Eureka!" moment, one of many as the comparatively untapped world of aerodynamics came to prominence.

The Goodwood incident had occurred in the mid-1960s. By 1969, the development process had become blatantly obvious as F1 cars sprouted wings, and the rear aerofoils became higher with each race. It came to a point when, during the 1969 Spanish Grand Prix, serious failures (both on Lotus cars) caused Graham Hill and Jochen Rindt to crash

heavily - thankfully without life-threatening injury. Immediate legislation required the wings to be trimmed back, but the idea itself continue to grow, particularly in the fertile mind of Colin Chapman, who relished exciting new challenges such as this.

The Lotus boss took his aerodynamic thinking outside a box that, thus far, contained an assortment of wings and flaps to be attached to the bodywork and chassis. Standing back and examining the entire car and its shape, Chapman came up with an aircheating wedge concept, the low-profile chisel nose on the Lotus 72 being made possible by mounting the radiators on the sides rather than up front. There were also changes to the braking system and



Previous pages: Jackie Stewart was a dominant force, winning two World Championships before retiring at the end of 1973.

Left: Jochen Rindt and the Lotus 72 proved a match made in heaven. The pairing won four Grands Prix en route to a World Championship in 1970.

Right: Bruce McLaren's skill extended to designing and building his own road car, the McLaren M6GT, pictured in early 1970 outside his home in Weybridge, England.

Far right: March scored a considerable coup in 1970 by having Jackie Stewart race one of their cars, entered by Ken Tyrrell.

Right: The founding directors of March Engineering, pictured with a March 701 outside the factory in Bicester, England. Back row Alan Rees (left) and Graham Coaker. Front row Robin Herd (left) and Max Mosley.





suspension, the overall effect of which did not meet Rindt's approval as he found the Lotus 72 difficult to drive when it first took to the track in April 1970.

JOCHEN MEETS THE ROYALS

Rindt became even more disenchanted when he was thus forced to fall back on the Lotus 49, now in its fourth season. His disinterest was obvious at Monaco, as he circulated in the midfield, clearly wishing the race to be over with. But when several of those ahead gradually dropped out for various reasons, the Austrian suddenly realised he was in with a shout. The leader, Brabham, may have been 15 seconds ahead but this was the sort of challenge Rindt relished.

Flinging the Lotus through the streets like a gokart, Rindt repeatedly broke the lap record as he closed in on the triple champion. At the start of the final lap, they were separated by just 1.3 seconds; a substantially reduced gap but a position that was unlikely to change on the narrow street circuit with the minimum of overtaking opportunities. Nonetheless, Rindt pressed on, the red and white Lotus with its gold nose growing larger in Brabham's mirrors. Going into the final corner, Brabham locked his brakes and slid into the straw bales, Rindt nipping through to meet his unexpected appointment with Prince Rainier and Princess Grace in the Royal Box. For a Grand Prix with a colourful history, this episode

took some beating. But there would be a repeat, of sorts, two months later.

When Brabham and Rindt found themselves fighting for the lead of the British Grand Prix at Brands Hatch, Brabham made sure he wasn't going to let this one get away. After playing a waiting game, Brabham sized up the Lotus, snatched the lead and pulled away. Rindt clearly had no answer as they began the final lap 14 seconds apart. When they reappeared, Rindt was in front and heading for his second surprise win in as many months. Seconds later, Brabham rolled into view with a dead engine, but just enough momentum to coast to the line and claim second place.

A man of few words, Brabham selected a few choice Aussie expressions when he discovered the cause of his loss. The Ford V8 engine had been set to run on full rich fuel while being warmed up prior to the race. Unfortunately, his mechanic forgot to return the setting to normal, Brabham using too much fuel as a result. The man responsible was Ron Dennis; a supreme irony given that, as we shall see in the Eighties, Dennis would become one of the most successful F1 team bosses of all time thanks, among other things, to a meticulous eye for detail.

An hour or so after the Grand Prix at Brands Hatch, however, it seemed Dennis would have a reprieve when Rindt's Lotus was declared illegal. The scrutineers contended that the stays supporting the rear wing were bent and, had they been straight,



Left: Jackie Stewart steers his winning March between the blazing Ferrari of Jacky Ickx (foreground) and Jackie Oliver's BRM during the 1970 Spanish Grand Prix at Jarama.

the wing would have been above the legal height. Chapman was not the sort to take this lying down. Rindt was eventually reinstated after much dithering by the scrutineers who, as Chapman testily pointed out, did little for their cause by conducting their measurements on a piece of ground that was far from level. Such a basic flaw would be as unlikely today as a mechanic causing a race to be lost for the want of a simple twist of his screwdriver.

Jackie Stewart had been on the British Grands Prix list of retirements. The reigning World Champion was happy to be there, if only because it brought a merciful end to his struggle with a car he described as "charging around" Brands Hatch like a wild horse out of control, leaping from one side of the road to the other and knocking the hell out of me. There's nothing I can do about it." That last sentence referred as much to an inability to make his car - a March-Ford - handle satisfactorily as it did to the reason why he was driving this car in the first place.

Stewart and his entrant, Ken Tyrrell, had been placed in a dilemma at the end of 1969 despite winning the championship in their Matra-Ford. Matra had been taken over by Simca and it had been made clear by the parent company, Chrysler, that if Tyrrell wished to continue with the French chassis then, for political and image reasons, a Matra V12 would have to replace the Ford-Cosworth DFV.

Stewart was adamant that he needed to stay with the British engine. The problem would be finding a

chassis to put it in. No rival - be it Lotus, Brabham or McLaren – would be willing to supply a chassis to a team that was likely to give them a very hard time. The moment could not have been better for March Engineering.

THE IMPUDENCE OF MARCH

Formed by Max Mosley, Alan Rees, Graham Coaker and Robin Herd, March (an amalgam of their initials) had astounded everyone with their audacity. Not only was company from Bicester building Formula 3, Formula 2 and CanAm cars, they would also enter a works team in Formula 1 - and make their cars available for whoever wished to buy them. Tyrrell and Stewart fell into that category, simply because they had no alternative.

Having the world champions come on board was a glorious feather in the March cap. It prompted Chris Amon to move from Ferrari since driving the works March would provide the New Zealander (who had yet to win a Grand Prix) with the perfect opportunity to display his undoubted talent against that of Stewart. Amon was sick and tired of Ferrari and he had not been impressed when their latest engine, a flat-12, gave trouble during testing. As would prove typical in the luckless Kiwi's career, he had decided to move at precisely the wrong time.

Not that March cared about that as they signed



Right: Piers Courage was another fatality in 1970 when his De Tomaso crashed during the Dutch Grand Prix at Zandvoort.

Jo Siffert (winner of the 1968 British Grand Prix) to drive their second car and farmed out a third car to be run by a small British team for Ronnie Peterson, a young Swede with an exciting style and a promising future. As if that was not enough for a fledgling company with zero experience of running a team, the coup de grâce against their many doubters came when it was announced that the American oil company, STP, would enter a March for Mario Andretti, the reigning USAC (United States Auto Club) Champion. It was an extraordinary feat that has not been equalled since by a new manufacturer.

It seemed workable at first, particularly when March took pole position for their first Grand Prix in South Africa and Stewart went on to score a partially fortuitous win in Spain. By the time of the British Grand Prix, however, the inadequacies of the March 701 chassis were being exposed by the dips and bumps of Brands Hatch and expressed even more colourfully by Amon when he described the car as "a heap of sh*t".

The struggle with the recalcitrant March exacerbated Stewart's unhappiness as he dealt with motor sport's continuing catalogue of tragedy, some of it coming when least expected ... on a weekday.

On Tuesday 2 June, Bruce McLaren had made the familiar trip to Goodwood in order to test his latest car for the forthcoming CanAm sportscar championship in North America. When the rear bodywork flew off on the 170 mph back straight, the McLaren, minus most of its colossal downforce, spun into a marshals' post. Bruce was killed instantly.

The day after attending a memorial service for the popular New Zealander, Formula 1 people found themselves at the funeral of Piers Courage. The debonair Englishman had lost his life when his De Tomaso (entered by Frank Williams) overturned and caught fire during the Dutch Grand Prix. Two major tragedies in the space of a few weeks knocked the stuffing out of international motor racing.

MIXED EMOTION

Rindt was badly affected by the death of Courage, his grim expression, despite a first victory with the Lotus 72, saying as much as stood on the rostrum in Holland. After his initial doubts about the Lotus, Rindt's confidence had begun to soar, the rather lucky result at Brands Hatch being followed in Germany by an epic fight with the Ferrari of Jacky lckx and a win that prompted the declaration: "A monkey could win in this car." A repeat performance at his home Grand Prix would have made Rindt the first Austrian World Champion but retirement at the Österreichring meant the seemingly inevitable was postponed until the Italian Grand Prix.

Searching for more speed with the Lotus 72, Chapman elected to remove the front and rear wings during practice on the superfast circuit. When

Opposite: Jochen Rindt was the solemn victor in Holland following the loss of his friend, Piers Courage.





Right: The wreckage of Jochen Rindt's Lotus is returned to the pits at Monza.

John Miles tried the car, the Lotus number 2 driver found the oversteer scarily excessive on Monza's fast curves. The view of the studious, bespectacled Englishman, that the car was totally unmanageable, was not shared by either Chapman or Rindt, who opted to run the 72 without wings during qualifying.

On the 180 mph approach to the final corner, Rindt's Lotus suddenly went out of control due, not to the risky aerodynamic set-up, but a brake failure. The car smashed into a steel barrier, the impact tearing off the front suspension and bulkhead. Rindt died soon afterwards because of injuries inflicted by the seat-belt buckle. He had paid a dreadful price for not wearing the crotch straps that would have prevented him from being pulled further into the cockpit. The race itself provided a heady victory for Clay Regazzoni and Ferrari, a result which, fittingly, would contribute towards Jochen Rindt becoming the first and, to date only, posthumous World Champion.

Rindt had taken the chequered flag two weeks before at Oulton Park, where he won a heat of the Gold Cup non-championship F1 meeting. The last thing British fans had seen of their dashing hero was when he pulled up moments after the finish, climbed from the Lotus, vaulted a fence and ran across the field to a waiting plane. Such an unconventional departure was in keeping with the comparatively relaxed F1 calendar at the time.

Non-championship races (there were three in 1970) gave F1 teams an opportunity to experiment

with developments that might not otherwise have been tried during a Grand Prix meeting. The Gold Cup, however, had been deeply significant for two reasons: it marked a victory for John Surtees in a car of his own creation; and it saw the debut of a brand new Grand Prix machine. In a world that thrives on rumour and gossip, the first Tyrrell F1 car had been one of motor sport's best kept secrets.

It had been one thing to accept that the best solution to Tyrrell's quandary would be to build their own car; guite another to realise it in what, essentially, was a cluster of sheds in a former timber yard. Ken employed Derek Gardner, a competent engineer not well known in F1 circles, to design a car in his home in Warwickshire, the car itself constructed behind locked doors in Tyrrell's workshop in Surrey. The engine, of course, would be a DFV, Tyrrell arousing no suspicion when he ordered a couple from Cosworth Engineering. The motor racing world was stunned when the royal blue machine was unveiled on 17 August 1970; stunned because they knew nothing about it and stunned because the car, with its distinctive Coke-bottle shape, looked the part.

Stewart quickly went on to prove it, first by setting the fastest lap at Oulton Park and then by leading the Canadian and US Grands Prix before the inevitable teething problems intervened.

Despite these early setbacks, it was clear that this combination would be formidable force.



Left: Emerson Fittipaldi stepped up to the challenge of taking Jochen Rindt's place as leader of the Lotus team. The Brazilian claimed five wins and the championship in 1972.

MONEY TALKS

Jackie Stewart would win six of the 11 championship races in 1971. The British Grand Prix was one of them as Stewart lapped all but two of the remaining 23 starters. If the Silverstone race was dull as a result, it was at least significant because of the commercial changes gradually creeping into the sport. The race itself had acquired the title Woolmark British Grand Prix in deference to the International Wool Secretariat using F1 racing as a means of promoting its image. Hospitality tents had sprung up towards the rear of the paddock as Yardley, John Player, Brooke Bond Oxo and other sponsors began to utilise their association with F1.

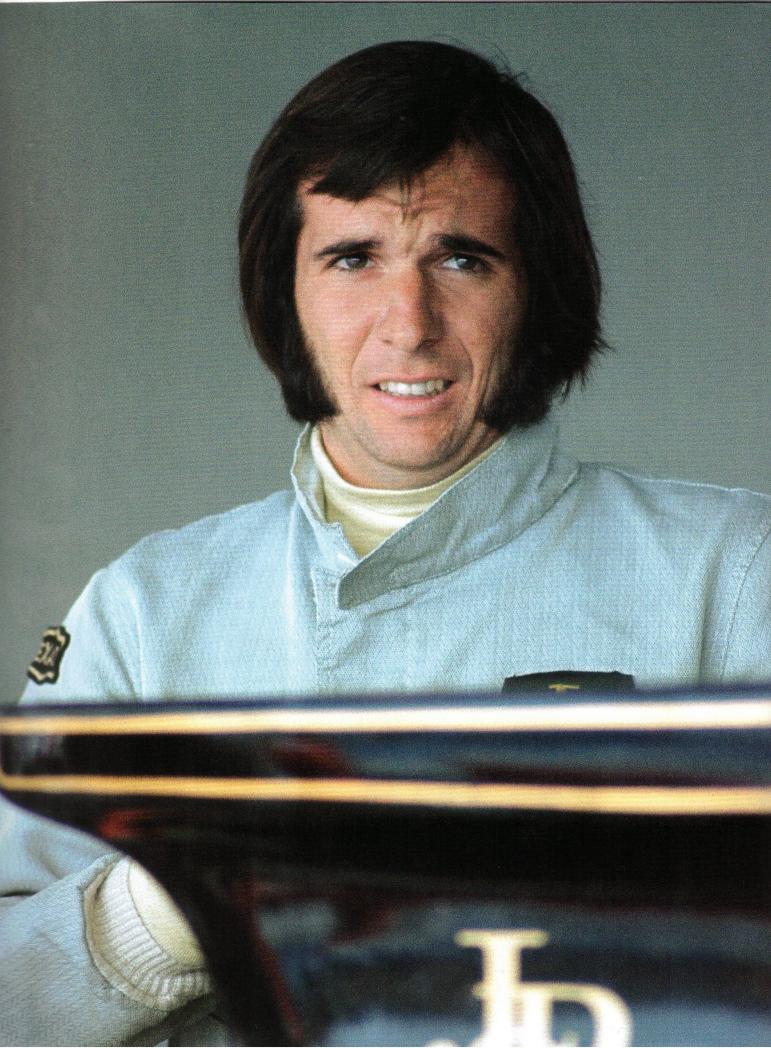
Silverstone, in turn, was staying in step with rising financial opportunities. Silverstone Circuits Limited, a wholly owned subsidiary of the British Racing Drivers' Club, had been formed to handle the commercial administration of the circuit. The Silverstone Trust had been established to provide the money necessary for the acquisition of the freeholds.

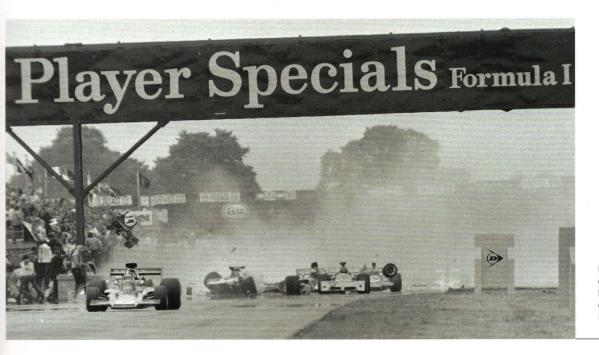
Then, without warning, the circuit's future was put in jeopardy when Silverstone was listed as a possible site for London's third airport, despite being almost 80 miles north of the city centre. After several worrying months, the threat passed and work resumed on establishing the circuit as a top-class motor racing facility. More than 600 acres were purchased at various stages to complete the estate by the end of

1971. Thus, the BRDC not only ran the racing but owned the circuit as well.

Not surprisingly, the enterprising Colin Chapman had been at the forefront of exploiting new commercial opportunities. In 1968, he had caused a stir by eschewing the traditional Lotus colour scheme of British Racing Green with a yellow stripe by having his cars resemble a cigarette packet. This was thanks to the relaxation of rules allowing the advertising of financial support outside the traditional area of trade sponsorship. His team was known as Gold Leaf Team Lotus; the cars were painted red, white and gold. The disapproval from dyed-in-the-wool F1 supporters would be mild compared to the outrage over what Chapman and his sponsor did next.

At the beginning of 1972, Chapman resprayed his cars in black. The 72s, with their gold pin-striping and lettering, looked striking and were well-received. Not so the news that the cars were to be called "John Player Specials" with no reference whatsoever to Lotus. Adding fuel to the fire, Player's announced they would also be sponsoring the British Grand Prix, henceforth to be known as the John Player Grand Prix. Such a heavy-handed approach at the time was more than many race supporters could stomach. The correspondence columns of the motoring press bristled with indignation. The show, of course, went on. There was a championship to be won and, to John Player & Sons' delight, it was claimed by a John Player Special, driven by a highly talented young Brazilian.





Left: Emerson Fittipaldi continues as chaos erupts behind the Lotus at the end of the first lap of the 1973 British Grand Prix.

SOUTH AMERICAN ONSLAUGHT

Emerson Fittipaldi had arrived in Europe as a relative unknown at the beginning of 1969. He changed all that by immediately dominating Formula Ford and then the British Formula 3 Championship. Halfway through 1970, the 23-year-old made his Formula 1 debut with Lotus. He may have been at the back of the grid in an elderly Lotus 49, but Emerson saw this as a golden opportunity to gain experience without pressure to perform.

The situation changed unexpectedly two months later when Rindt was killed at Monza and Fittipaldi found himself not only leading the team but also doing whatever he could to ensure Rindt's name would remain at the top of the championship table. Remarkably, Fittipaldi did even better than anyone could have expected as he won the United States Grand Prix after a canny drive that would become his hallmark. This fast-but-unflurried style would contribute greatly to the string of victories in 1972 that made him the youngest World Champion and he couldn't have cared less what colour the car was painted or what it was supposed to be called. All Fittipaldi knew was that the Lotus suited him perfectly.

It was the same in 1973, the only problem being that Ronnie Peterson had been signed by Chapman to drive the other car. The Swede had spent three indifferent years with March, yet it had been obvious that he was fearless and fast; a driver in the mould of Rindt and keen to be measured against the reigning World Champion.

Peterson's season got off to a bad start as he retired from the first two races – which were won by Fittipaldi. Worse was to follow when Peterson ran out of fuel while heading for what should have been an emotional first win in his home Grand Prix. Good fortune would finally come his way in France - at the expense of Fittipaldi. Emerson had been battling for the lead with the McLaren of Jody Scheckter, a bullish young South African making his Grand Prix debut in Europe, when the two collided and allowed Peterson through. Scheckter's aggressive driving would make a greater and potentially disastrous impression at the next race in Britain.

Woodcote, the just-about-flat-out corner at the end of Silverstone's lap, had been causing concern among safety-conscious officials for quite some time. Scheckter was about to write the sweeping right-hander into history - along with several Grand Prix cars.

Holding fourth place at the end of the first lap, Scheckter put a rear wheel in the dirt at the exit of Woodcote, causing the McLaren to go into a big slide before shooting straight across the track. Scheckter managed to reach the pit wall without being touched but the impact with the breeze blocks sent him rolling backwards as the remaining 20 or so cars swept through Woodcote, each driver busy defending

Opposite: Fittipaldi was on the pace as leading championship contender for Lotus in 1972 and 1973.



Right: Marshals belatedly attend to the wreckage of Roger Williamson's March during the 1973 Dutch Grand Prix at Zandvoort.

position while controlling their own car, never expecting to see another sideways and dead ahead.

One or two made it through but, for each succeeding driver, the warning was reduced in relation to their view of what was coming. In an instant, there was chaos as wings, wheels and bodywork flew in all directions around the pin-balling machinery. Nine cars were involved, many of them written off. Miraculously, none had caught fire given that each had 200 litres and more of fuel on board. And the only injury was a badly broken ankle sustained by Andrea de Adamich. It took 53 minutes for rescuers to carefully cut the Italian from his Brabham.

A TRULY SHOCKING FATALITY

The Silverstone incident highlighted a serious shortcoming in the running of a race. Peterson's Lotus and the Tyrrell of Jackie Stewart had led off the line, Stewart diving inside the Swede with a brilliant opportunist move not long into the first lap. Keen to hammer home the element of surprise, Stewart had driven the first lap on the edge. It was the same on the second, by which time all hell had broken loose behind him at Woodcote.

Following laid down procedure, officials had stopped the race by showing a red flag at the startfinish line. But there was nothing to warn the leaders as they bore down on Woodcote at 175 mph for a second time. There were yellow warning flags – but nothing to indicate that the track was completely blocked just out of sight. On the alert, Stewart managed to jump on the brakes and raise his arm in warning before shuddering to a halt just before the wreckage. After that, it would become standard practice for crossed flags to be shown at each marshals' post as notice of an impending stoppage.

That had been a serious lesson learned cheaply compared to what would happen two weeks later during the Dutch Grand Prix. On the eighth lap, Roger Williamson's March left the road due to a suspected front suspension or tyre failure. The car hit the barrier, which bent back as the March ran along it, ripping off a fuel tank on the right-hand side. When the car came to rest, it was upside down and alight.

David Purley, a British driver who happened to be following Williamson, stopped immediately and ran back to assist his friend. It was to a heart-breaking and hopeless task, the inverted angle of the March being so severe – and in the absence of help from marshals who stood helplessly by not knowing what to do – Purley could not right the car as the fire took hold. All the while, the race continued; unthinkable by today's standards.

Drivers were signalling to officials as they passed the pits but, in the absence of proper telephone communication with the marshals' post near the scene of the accident, no one in control knew what to make of it. The drivers were also confused. They



Left: Last laps for Jackie Stewart as the Tyrrell driver leads the Ferrari of Arturo Merzario during practice for the 1973 United States Grand Prix at Watkins Glen.

thought they could see the driver out of his car attempting to put out the flames, when in fact, it was Purley trying desperately to save his friend from being burned alive (Purley's car was actually not in the line of sight on the other side of the track and also shrouded in smoke from the burning March). Williamson was 25, and taking part in only his second Grand Prix.

Williamson had been part of the next wave of young drivers coming through as some of their seniors headed towards retirement. Jackie Stewart had given the matter serious thought and decided, come what may, he would stop at the end of the season. Even though he was only 34 and in his prime, the Scotsman's decision - made in April but not told to anyone except Walter Hayes and Ken Tyrrell – was given legitimacy when he won his third title before the season had finished. Besides, Stewart worked out that more than 40 friends and colleagues had been killed during his time as a racing driver. That catalogue was to have one more desperate entry as Stewart prepared for his final race.

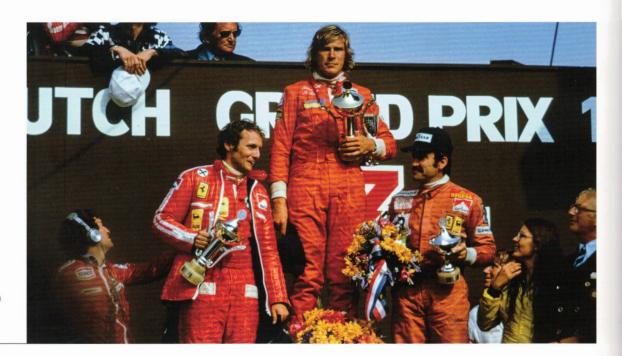
Tyrrell was in no doubt about who should replace his friend as number 1. François Cevert had come through a French schooling system supported by Elf, the oil and petrol company that also sponsored Ken and fully approved of Cevert's transition to F1 with Tyrrell in 1970. Cevert had watched and learned in the wheel tracks of the master he very much admired. When Stewart won the German Grand Prix at the

Nürburgring Nordschleife, Cevert dutifully followed him home, Jackie later commenting: "François was guicker; he could easily have won that race." Praise indeed and a boost to the Parisian's confidence. Not that it was needed by this stage.

The final race was at Watkins Glen, a challenging track made to look stunning in the autumnal hues of the Finger Lake district in upper New York State. Morning practice, held in perfect conditions on the second day, Saturday, was close to finishing when Cevert went out to improve on his then fourth-fastest time. Attacking a tricky but fast uphill Esses, the Tyrrell went out of control, slamming into the barrier on the right before careering across and destroying itself against the barrier on the left. Cevert was killed instantly. Formula 1, and the Tyrrell team in particular, was devastated by the loss of such a charming, handsome man with a huge future. Tyrrell withdrew his entry, Stewart's racing career ending under the worst possible circumstances. Twenty-seven wins from just 99 starts meant nothing at that particular moment.

THE EFFERVESCENT ENGLISHMAN AND THE ALOOF AUSTRIAN

Niki Lauda's arrival in Formula 1 was unconventional and typical of a man few had heard of. It was thought the Austrian had more money than sense when he



Right: Niki Lauda (left) and Clay Regazzoni join James Hunt on the podium at Zandvoort as the Englishman celebrates his first F1 win in the 1975 Dutch Grand Prix.

funded his place in the March F1 team in 1972 with a bank loan using his life insurance as security - and then proceeded to go nowhere. This was more to do with an overcomplicated car than an underprepared driver. Undaunted, Lauda went to Louis Stanley, the pompous boss of BRM, and promised sponsorship he didn't have. Fortunately, Lauda's skill matched his fortitude as he hustled the BRM hard enough at Monaco in 1973 to catch the attention of Enzo Ferrari. Lauda would never look back from the moment he signed to drive for the Italian. Using development skills that had impressed March, Lauda improved the Ferrari to such an extent that he was in the running for the 1974 title, only to be let down by a mixture of bad luck and impetuosity. Learning his lessons and, more importantly, acting on them, Lauda won his first championship in 1975. It would prove a dream year compared to what would happen next.

The knock-on effect of one driver's decision can have a profound influence on the progress of another. Emerson Fittipaldi was to provide a classic example at the end of 1975. Having moved from Lotus to McLaren and won a second championship in 1974, Fittipaldi then left McLaren in the lurch at the eleventh hour as he went off to help his brother start an all-Brazilian F1 team. As one team arrived, another departed, a lack of finance having forced the privateer Hesketh team to shut its doors and leave James Hunt without a drive.

It was Hobson's Choice for both as Hunt and McLaren came together, although it has to be said that McLaren's risk factor was higher thanks to an early reputation that had earned James the nickname "Hunt the Shunt". But there was no doubt that the Englishman could be quick, given the right opportunity. And there was none better than this - as Lauda was about to find out.

The 1976 season would become a classic as the title chase swung between Hunt and Lauda through a series of outstanding drives, political intrigue, disqualifications and occasional discord manufactured and milked by an increasingly attentive media. The story, however, seemed to have literally crashed and burned at the German Grand Prix on 1 August, when Lauda suffered a fiery accident on the Nürburgring Nordschleife. Having breathed in the fumes from the blazing Ferrari, Lauda was given the Last Rites not long after he had been taken to a burns unit in Mannheim. The priest – and everyone else – had completely underestimated a sense of resolve that would be as powerful as it was stunning in its execution. Six weeks later, the heavily bandaged Lauda was back in the cockpit at, of all places given the drama, the Autodromo Internationale di Monza, one of the truly great theatres of motor racing. When he finished fourth that day, it took its place in the pantheon of the greatest sporting comebacks of all time.

The revived championship would continue to its final act in Japan, where controversy would raise its head in yet another form. In conditions that would



not be countenanced today, the race took place in teeming rain. Having survived his near-fatal accident several weeks earlier, Lauda's priorities were clearly defined. He stopped his Ferrari after a couple of laps and walked away from not only the race but also a World Championship that Hunt would ultimately win by a single point as he came home third. And so ended a rollercoaster season that would be worthy of a fulllength feature film 40 years later.

Bernie Ecclestone made enemies as readily as he made money. The truth is that the majority of his detractors would have been frustrated by discovering the loss of a deal they thought they had won. That tenet of Bernie's modus operandi went back to the Fifties when he dealt in second-hand motorcycles and cars. Traders would be halfway home before realising the intricate exchange involving several vehicles had ended with something they didn't actually want.

An interest in motor sport had led to a brief and unsuccessful – if occasionally spectacular – few years as a racer before Ecclestone decided that he would be better off managing drivers than attempting to be one. This would bring hard-earned lessons about the other side of the coin as two of his clientele - Stuart Lewis-Evans and Jochen Rindt – died at the wheel under horrifying circumstances.

After disappearing briefly from the scene, Ecclestone reappeared in 1971 as the owner of Brabham, a role that brought him face to face with the shambling piecemeal negotiating procedure between

individual F1 teams and race organisers. He had little difficulty in persuading fellow competitors of the benefits associated with collective bargaining. This would be the foundation of his power base. By 1976, Ecclestone had begun to think about extending his influence to television by forcing broadcasters to pay for an annual contract rather than cherry-picking the more popular races.

For his part, Ecclestone realised he needed to present a professional package - and F1 was anything but. Race weekend schedules were as varied as the quality and quantity of the entry, teams choosing not to turn up if they were uncompetitive.

Ecclestone's eye for detail and perfection (Brabham was one of the first teams to have mechanics in uniforms, colour-coded to each day) would lead to a strict timetable and a guaranteed entry. Standards and the sport's popularity began to rise in company with increased exposure and income, Ecclestone taking his substantial cut of the latter. The team principals did not mind as they began to enjoy previously untold wealth.

One team owner, Max Mosley, took more than a passing interest. As a former barrister and a founding member of March, Mosley's sharp intellect brought an acute appreciation of the challenge ahead and Ecclestone's astute method of dealing with it. Together, they made a formidable team; the erudite lawyer and the streetwise former motor trader benefitting from each other's skillset.

Above: Calm before the storm. The McLaren of James Hunt (left) alongside Niki Lauda's Ferrari as they await the start of the 1976 British Grand Prix. They would become embroiled in a first-lap accident and a controversy that would rage for months.



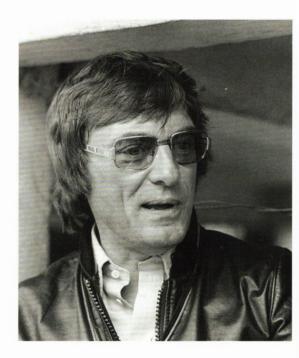
Right: Max Mosley and Bernie Ecclestone (far right) began to exert considerable influence - much to the annovance of motor sport's governing body.

The teams were marshalled under the heading of Formula 1 Constructors' Association (F1CA - which was soon changed to FOCA once a rude connotation in a foreign language had been pointed out). The sport's governing body, seeing this potential menace on the horizon, attempted to unite the race organisers. It soon became clear to Mosley and Ecclestone that their first job was to confound and confuse in order to prevent this from happening.

The pair had tested the water at Monaco in 1972 by negotiating on the teams' behalf when the organisers, having agreed to allow 25 starters, suddenly decided to limit the number. Mosley and Ecclestone persuaded the teams to stand firm and work on the basis that the paying spectators would indirectly apply pressure when faced with an empty track. No organiser had ever been put in such a position before thanks to this blatant removal of the opportunity to divide and conquer. Twenty-five starters were duly allowed.

Then they met Jean-Marie Balestre, the head of the French motor sport federation and a successful businessman. Balestre had never competed but he had been a journalist and editor of l'Auto Journal, a respected motoring publication in France. Balestre enjoyed politics at a national level and he saw the prospective confrontation with the F1 teams as a means of making a more global impression.

His first official encounter, in 1975, did not go well when Mosley and Ecclestone went to Brussels



to negotiate prize funds with the organisers of the European races. When the discussion appeared to be going nowhere, Ecclestone and Mosley suddenly threatened to leave to catch an imaginary flight. In the ensuing mild panic, Balestre could not prevent his associates, desperate to sort their budgets, relenting and accepting a demand for an increase in fees. When Canada later refused to play ball, the teams stood their ground and forced the race to be cancelled. The Canadians were furious – but impotent. It was an indication of how the F1 political structure was entering a very different world.

SIX WHEELS AND A FAN

The essence of that world remained the same insofar as it was all about finding the technical edge and making your car go faster than the next one. Some experiments were successful; others not. In 1976, Ken Tyrrell pulled off another surprise by designing and building, in complete secrecy, a car with six wheels, four of them at the front. The theory of a smaller frontal area was largely defeated by the drag created by the standard rear wheels, but not before Tyrrell had scored a historymaking one-two in the 1976 Swedish Grand Prix.

Two years later, at the same circuit, the F1 world was thrown into angry disarray when Brabham produced a car that was deemed to be pushing the regulatory boundaries way beyond the letter of the law.



Left: Officials and drivers attend to Ronnie Peterson in the aftermath of a first-lap accident during the 1978 Italian Grand Prix. The Lotus driver would die of his injuries later that night.

Gordon Murray had produced a car with an enormous fan at the rear, the purpose of which, according to Brabham's colourful and imaginative designer, was to help cool the car. This it undoubtedly did - but, in conjunction with ground-hugging skirts around the bottom of the engine bay, it also helped suck the car to the track and generate untold downforce and cornering power. The Brabham was never declared illegal, but it would be a sign of Ecclestone's grasp of the bigger picture that he chose to withdraw the car rather than upset the team bosses he was trying to unite.

The so-called fan car had been Murray's answer to a phenomenon pioneered by Colin Chapman and his engineering team at Lotus. By utilising the passage of air through the car's sidepods as it went around an inverted wing, the Lotus 79 created so-called "ground effect" that made the car feel, in the words of its driver, Mario Andretti, "like it's painted to the road". Andretti would be unchallenged on his way to the championship in 1978, thanks to the car's superiority and the cooperation of Ronnie Peterson as the Swede dutifully played the role of number 2 driver.

Andretti's joy, however, would be shattered 24 hours after winning the title at Monza when Peterson died unexpectedly of leg injuries received in a first-lap accident. The Lotus had been shoved into the crash barriers shortly after the start and triggered a multi-car collision. The race had been stopped but, apart from Peterson's injuries - at first thought not to be lifethreatening – a small but very significant development

was taking place at a police cordon between the pits and the accident scene.

Conscious that medical support varied shockingly from circuit to circuit, Ecclestone had charged Professor Sidney Watkins, one of the world's leading neurosurgeons, with investigating and recommending a means of overcoming the medical inconsistencies. Watkins had been shocked, for instance, when he arrived at Hockenheim in 1978 to find there was no medical centre of any description.

Facilities appeared to be better at Monza, where Watkins formed a working relationship with the chief medical officer despite continued resistance from other Italian guarters. That opposition would reach a threatening proportion when Watkins tried to reach the scene of Peterson's accident. Police officers drew their truncheons as a mass of media, officials, team members and general hangers-on tried to get through. Realising the hopelessness of his task, Watkins headed for the medical centre and reached it just as the ambulance arrived with Peterson. The scene was chaotic.

Once inside the crowded room, Watkins was alarmed to find someone attempting to take photographs through his legs. A swift kick would be the first and simplest of many tasks Watkins knew he would need to carry out. This would mark the start of a far-reaching campaign, pursued relentlessly by the no-nonsense Professor and backed solidly by Ecclestone. It would change this aspect - among many – of Formula 1 in the coming decade.





Above: The sight people dreaded most. Smoke rises from the scene of Piers Courage's fatal accident during the 1970 Dutch Grand Prix at Zandvoort.

Right: François Cevert was poised to assume leadership of the Tyrrell team, having learned from the master, Jackie Stewart (right).

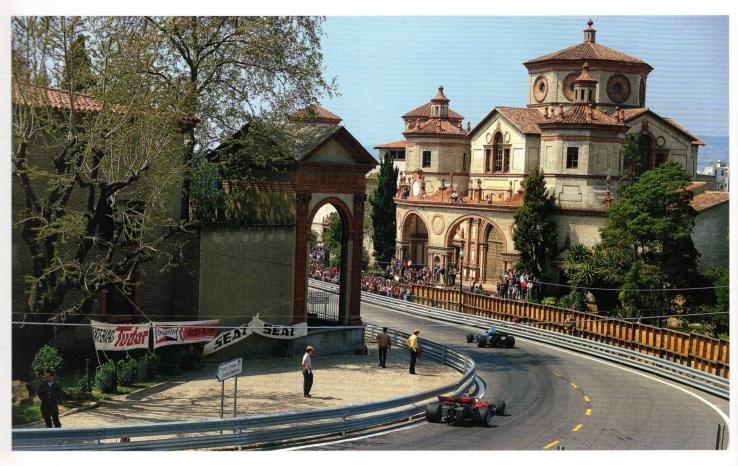
Left: A slippery track surface at the scene of a fiery accident during the 1970 Spanish Grand Prix does not help the handling of Jackie Stewart's March, as the leader slides onto a kerb at Jarama.

Following pages: A surprised Jochen Rindt (leading the lapped March of Ronnie Peterson) takes the chequered flag in the 1970 British Grand Prix at Brands Hatch. The absence of a tumultuous welcome is due to the crowd looking for Jack Brabham, the erstwhile leader having run out of fuel on the last lap.









Above: Winding roads and beautiful architecture mark out the striking street circuit at Montjuich Park, high above Barcelona, for the Spanish Grand Prix.

Right: Jackie Stewart and Tyrrell made a winning combination in 1971, as the Scotsman comfortably claimed his second World Championship.

Opposite: Emerson Fittipaldi won the Italian Grand Prix on his way to the World Championship with Lotus in 1972.



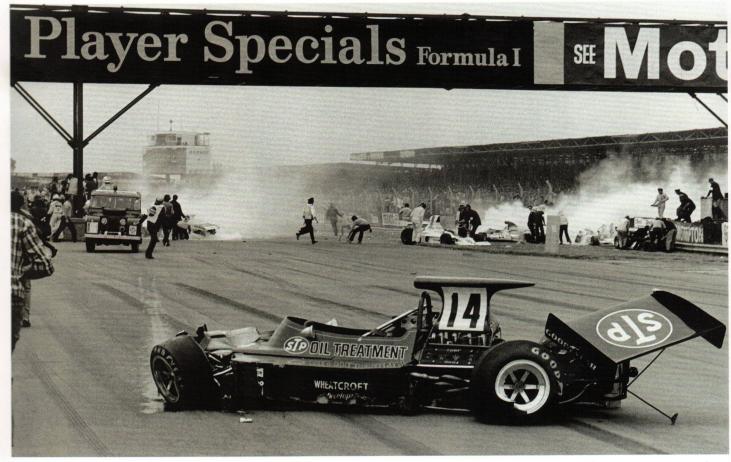




Opposite: Jackie Stewart describes the Watkins Glen track during a conducted tour for journalists before practice in October 1973. This should have been the World Champion's last Grand Prix but it would be cut short by a fatal accident to his Tyrrell team-mate, François Cevert.

Left: Roger Williamson's promising career was cut short by a fatal accident in his March during the 1973 Dutch Grand Prix.

Below: Roger Williamson's abandoned March lies in the foreground after the multi-car collision in the 1973 British Grand Prix.







Opposite: Glorious chaos on the podium at Monza as Ferrari's Clay Regazzoni celebrates victory in the 1975 Italian Grand Prix.

Left: Emerson Fittipaldi explains his reasons for not wishing to take part in the 1975 Spanish Grand Prix due to the poor installation of crash barriers on the Montjuich Park track.

Following pages: The home crowd was not happy when the organisers of the 1976 British Grand Prix threatened to prevent James Hunt from taking the restart following a first-lap collision at Brands Hatch.

Below: James Hunt gave Hesketh their only Grand Prix win in the 1975 Dutch Grand Prix at Zandvoort.













Left: The wreckage of Niki Lauda's burnt-out Ferrari is returned to the paddock at the Nürburgring in 1976.

Opposite: Niki Lauda tucks his Ferrari (#1) behind the sixwheel Tyrrell of Jody Scheckter at the start of the fateful 1976 German Grand Prix at the Nürburgring.

Below: Muted podium celebrations for the winner, James Hunt, with Jody Scheckter (left) and Jochen Mass as news emerges of Niki Lauda's serious accident during the 1976 German Grand Prix.



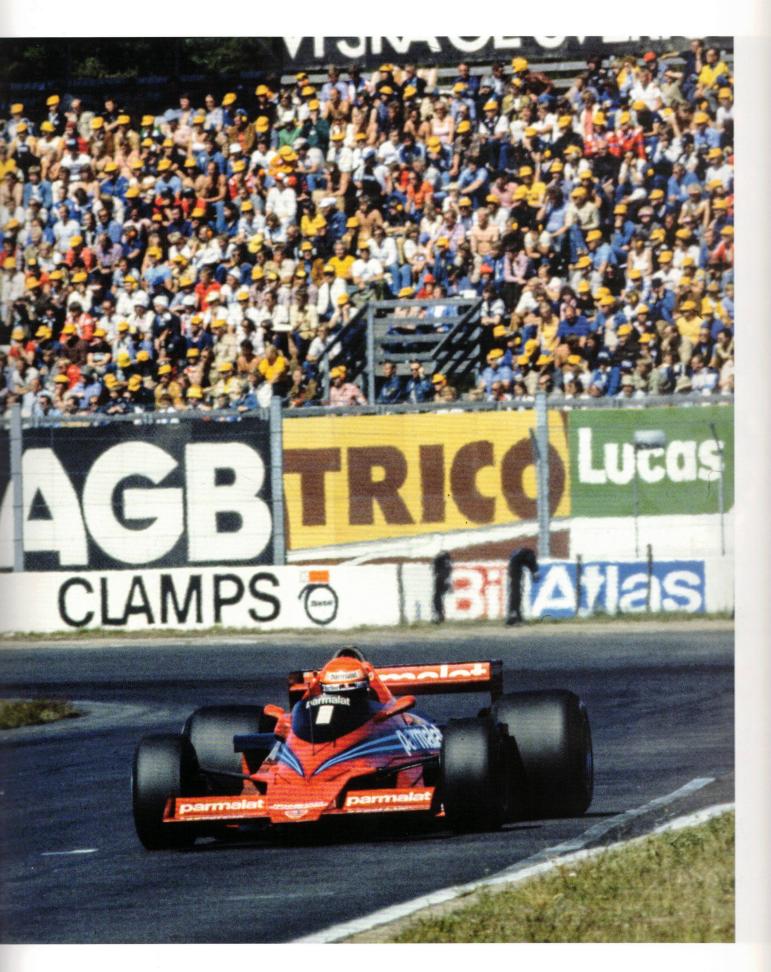




Above: Mario Andretti and Ronnie Peterson lead the 1978 German Grand Prix with the all-conquering Lotus 79.

Opposite: Niki Lauda did not have much success after switching from Ferrari to Brabham as reigning World Champion in 1978.

Left: Mario Andretti (left) and Ronnie Peterson at the 1978 British Grand Prix. Andretti would be devastated by the loss of his Lotus team-mate two months later.







Left: The Ferrari of Gilles Villeneuve leads the Ligier of Patrick Depailler and Jody Scheckter's Ferrari during the 1979 United States Grand Prix (West) at Long Beach.



COSSITE ANANIMATE AND THE MANAGEMENT OF THE SUIT

Of Alain Prost's 51 wins, 39 of them came in the '80s – when six different champions emerged. Ayrton Senna, recognising Prost as the benchmark, joined the Frenchman at McLaren and set in motion a ferocious duel that attracted the attention of a controversial administrative figurehead.







4. THE MAN IN THE WHITE SUIT

Jean-Marie Balestre had become President of the FIA's International Sporting Commission in 1978, and immediately transformed it into a more powerful autonomous body to be known as the Fédération Internationale du Sport Automobile (FISA). He had turned up at the first race of 1979 in Argentina wearing a white suit, as if to emphasise his position and a mounting ambition to purge F1 of what he saw as the menacing threat from Bernie Ecclestone and FOCA (the manufacturers' organisation). He had not been long in making his presence felt.

The season was barely 30 seconds old in Buenos Aires when a first-corner accident caused the race to be stopped. Balestre, who happened to be spectating at the scene, immediately began to rant and rave, blaming all and sundry. Balestre said it was his intention to ensure that drivers, regardless of their team or nationality, should be punished for indiscretions such as this. McLaren's John Watson was, in Balestre's opinion, the likely culprit.

If McLaren were surprised by such arbitrary judgement, they were outraged when Balestre, who had appointed himself Chief Steward, held an enquiry - to which McLaren representatives were not invited - and found Watson guilty. The Ulsterman was fined 10,000 Swiss Francs (about £3,000 at the time) with the added condition that he would not be allowed to take part in the next race in Brazil if the money was not forthcoming within 48 hours. Marlboro, McLaren's principal sponsor, eventually paid the fine.

The battle lines were drawn. In case anyone missed the point, Teddy Mayer, the boss of McLaren and a lawyer by profession, made it clear when he said: "There are ten or twelve teams in Formula 1, each

employing a lot of people, and some guy in a white suit turns up and tells us what to do. To be blunt about it, that is not acceptable."

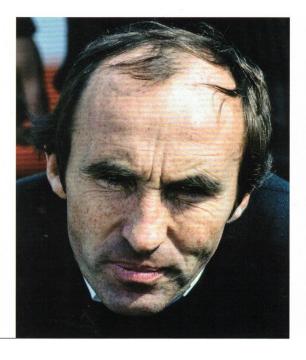
Going into 1979, few would have bet against Lotus scoring back-to-back championships with the latest version of the ground-effect car that had proved so effective. The fickle nature of F1 technicalities in these exploratory times would be demonstrated immediately when Ligier, a small French team, won in Argentina and Brazil with a neat and efficient car designed by Gérard Ducarouge. Jacques Laffite, who had won both races, and Patrick Depailler had dominated each with such remarkable ease that the championship seemed to be a foregone conclusion, even at such an early stage. The 1979 Lotus did not work – and Colin Chapman didn't know why. Ironically, while the Ligier clearly did work, subsequent events would show that Ducarouge didn't know why.

To further confound predictions, season previews had written off Ferrari, if only because the bulky nature of their flat-12 engine would rule against the ground effect phenomenon developed so effectively by Lotus around the narrower base of the Ford-Cosworth V8. At the end of the season, Jody Scheckter and his Ferrari team-mate, Gilles Villeneuve, had more championship points than anyone else thanks to consistency and reliability. It had been Ferrari's good fortune that a small but growing British team had not got their act together sooner.

Frank Williams had been the cheerful mate in the pub you couldn't help but like despite his perpetual inability to buy a round. His early days as a private Formula 1 entrant with a hotchpotch of uncompetitive cars had seen Williams regularly arrive back at London

us pages: Alain Prost ree of his four World ionships in the 1980s.

ne Williams of Alan eads Nelson Piquet's am at Monaco. These ould battle it out for the Championship in 1980.



Far right: Patrick Head formed a perfect partnership with Frank Williams.

Right: Frank Williams worked his way up through enthusiasm and graft.

> Heathrow and need to borrow the money required to get out of the car park. Every penny he had - and, often, there weren't many of those - would be spent on a racing car with its most effective power source being Frank's indefatigable and infectious enthusiasm.

> Williams's career as an entrant had crashed against the buffers many times. But when he tapped into previously unexploited backing from the Middle East, such diligent enterprise coincided with persuading Patrick Head to design the all-new Williams. This was the perfect partnership: Frank doing the talking and organising while Patrick designed the car. The triumvirate was complete when Alan Jones, a tough, no-nonsense Aussie, was hired to drive it. All three were of the same age, spoke the same direct language and were driven by the desire to joust with the giants of Formula 1. The first Williams in 1978 had been workmanlike and comparatively simple. The second embraced ground effect and lifted it onto another level - but too late in 1979 to do anything about the championship. 1980 was certain to be a different story. The FISA President had other ideas.

THIS IS WAR

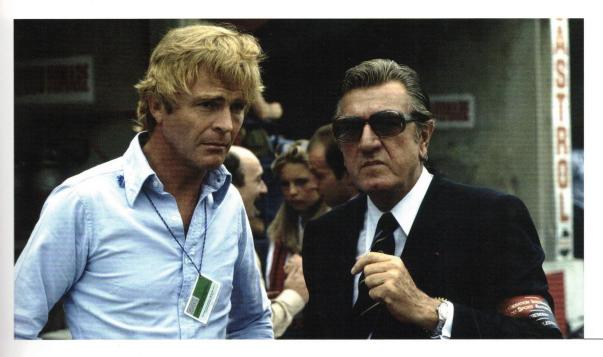
Balestre was quick to realise that the FOCA teams - essentially British, self-motivating and small - had become a growing irritation for the factory outfits from Ferrari, Renault and Alfa Romeo. The



manufacturers' annovance was hardening into distrust as Ecclestone continued to exercise and build FOCA's collective muscle. Besides, when push came to shove, it made sense for the big names to be aligned with the governing body although everyone was aware that Enzo Ferrari was politically astute an was likely to side with either FISA or FOCA according to his interests at any given moment. Balestre, for his part, was not averse to providing the preliminary aggravation – in the interest of the sport, of course.

Among the reforms introduced for 1980 was a mandatory drivers' briefing before each race. It was a sensible idea although its execution would be made unpalatable for the British by President Balestre using the occasion to adjust his leather armband of office and lecture the audience in French, followed by a translation by a minion into English. This quickly developed from an administrative procedure to a trial of strength. Members of FOCA instructed their drivers not to attend the briefings in Belgium and Monaco (rounds five and six of the championship). When the drivers were duly fined by FISA, the teams refused to pay. Balestre said he would suspend the drivers' licences until the money was forthcoming. Matters would clearly come to a head at the next race in Spair

Concerned about repercussions from the FIA in other forms of motoring (a fact not lost on Balestre), Ferrari, Renault and Alfa Romeo distanced themselve from the dispute and did not take part in the Spanish Grand Prix. When Jones won for Williams, the race



Left: Max Mosley relished political jousts with Jean-Marie Balestre (right), president of motor sport's governing body.

was declared illegal. This was perfect territory for Max Mosley, who was no long part of the March organisation he had founded 10 years earlier. He was now working hand-in-glove with Ecclestone and relishing the inevitable struggle with Balestre. That confrontation would take many forms.

At the South African Grand Prix earlier in the year, and noting the FISA President's habit of making himself part of podium ceremonies, Mosley advised an Afrikaner security guard that this man in a blazer with a leather armband was likely to make a nuisance of himself on the podium but, regrettably, would prove impossible to stop. The burly official took the bait and proudly rose to the challenge, Balestre's subsequent outrage being multiplied when he was prevented from helping René Arnoux of Renault and Ligier's Laffite and Didier Pironi celebrate a Gallic whitewash.

When it came to their home Grand Prix in June, the French clearly hoped for a repeat. Following the debacle in Spain, the FOCA teams were out to stop them now that championship status had been resumed. When Williams thrashed everyone in France, lones took great delight in brandishing a very large Union Flag while completing his victory lap. When he scored maximum points once more at Brands Hatch, lones was taking another important step towards a championship that would finally be won when the uncompromising Australian eased the Brabham of his title rival, Nelson Piquet, into the wall at the penultimate race in Canada.

Standing quietly and virtually unnoticed in the pit lane in Montreal, Ron Dennis was about to change the face of McLaren and some aspects of Formula 1 itself. Dennis had established a fine reputation for meticulous preparation through his company, Project Four Racing. His partner, John Barnard, was equally regarded for his scrupulous attention to detail as a first-class designer.

McLaren had fallen from grace to such an extent that the team's title sponsor, the American tobacco giants Marlboro, gave Teddy Mayer an ultimatum; either merge with Project Four Racing or preside over the depressing demise of a once-great name. Despite a reluctance to let go, Mayer was astute enough to accept he had little option.

McLaren International was born and from this came the first all carbon-fibre racing car; a concept that would revolutionise design because of its improved rigidity, lightness and vastly increased safety for the driver. The problem was, where would McLaren be racing this car?

The struggle for control of the commercial aspects of Formula 1, coupled with Balestre's intention to introduce changes to the cars that would favour the manufacturer teams, prompted FOCA, through the legal guidance of Mosley, to issue writs against FISA. FOCA strengthened their hand further by encouraging 10 race promotors to come on board should no settlement be reached with FISA. But come on board with what, exactly?



Right: Renault were first to investigate the turbocharged alternative in Formula 1. Here, Alain Prost heads for victory in the 1981 Dutch Grand Prix at Zandvoort.

FOCA's dilemma was that they had little money, with sponsors threatening to pull out, and even less of a structure in place if it came to the running of a rival championship. A possible solution would come over a glass or two of schnapps.

In January 1981, Colin Chapman, Teddy Mayer and Mosley went skiing. Over dinner in their hotel near Kitzbühel, Chapman asked about a mural showing two men painting a cow. The waitress explained that, in the Middle Ages, a nearby town had been under siege and had run out of food. The situation was dire. They had one cow left and each day they would paint it a different colour and parade it within sight of the enemy to give the impression they had plenty of food. This immediately fired Chapman's imagination, his first thought being that FOCA should organise a race despite most of the teams being out of funds. What at first appeared to be a joke quickly became serious.

The South African organisers, sympathetic to FOCA, agreed to stage a Grand Prix in February. The race not only took place, but was also televised despite the absence of Ferrari, Renault and Alfa Romeo. It may not have been a round of the championship but the fact that FOCA appeared capable of successfully running an event did not go unnoticed - particularly as the FISAaligned Argentine Grand Prix had been cancelled.

Even worse, from the point of view of FISA and the three manufacturers, the next race on the FIA calendar was at Long Beach, the organiser in California making it clear that he would respect his contract with FOCA and stage a race. The pressure on Balestre to find a solution increased dramatically when Renault said they had to race at Long Beach because of their American automotive subsidiary. Little did they or Balestre know that the FOCA teams could not have afforded to cross the Atlantic on their own account had the race been solely down to them.

Balestre relented and abandoned his demand that all commercial aspects of Formula 1 should be in the hands of the FIA. In return, FOCA agreed to a reset of the regulatory design parameters for all cars in 1981. Both sides knew that the racing had barely the survived the issues between FISA and FOCA, but it was obvious that something had to be done. Spectator numbers had dropped off at one-third of the 15 circuits used by Formula 1 in 1980. Following this winter of serious discontent, agreement was finally reached just ten days before Long Beach. Known as the Concorde Agreement, this document signalled "peace in our time". But it would be an uneasy peace.

It was no coincidence that an increase in minimum weight, allied to the serious reduction in ground effect thanks to the absence of side skirts, would play into the hands of the three manufacturers and their earlier decision to investigate turbocharged engines. This was preferable to maintaining a forlorn chase of the FOCA teams and their mastery of ground effect.

The turbo alternative had been in the rules ever since 1966 when the formula changed to three



litres. As a sop to anyone wishing to save money and continue with the 1.5-litre engines from the previous Formula, it was permitted to turbocharge these units. No one took up an offer that was deemed impractical thanks to turbos being perceived as complicated, thirsty, prone to overheating - and no match for the lusty three-litre normally-aspirated engines. No one, that is, until Renault bravely made an entry to F1 with a turbocharged V6 at the 1977 British Grand Prix.

When the droning machine retired in a cloud of steam at Silverstone, the name "Yellow Teapot" was easily coined. Two years later, the jokes had stopped, particularly when Renault won their first Grand Prix at Dijon. The writing was on the wall for those who cared to read it. And now, with his change of rules for 1981, President Balestre had given a leg-up to the manufacturers as Ferrari and Alfa Romeo joined Renault in developing the turbo alternative.

Above: Gilles Villeneuve won two Grands Prix in 1981 with the Ferrari turbo.



Right: Niki Lauda made a remarkable comeback in 1982 by winning his third race with McLaren at Long Beach, California.

Halfway through 1981, the gradual swing towards turbo supremacy could be seen as Alain Prost won his first Grand Prix for Renault. The FOCA teams, however, were not yet done. John Watson gave McLaren their first victory with the carbon-fibre car at Silverstone. The championship was fought out between the latest Ford-Cosworth DFV-powered cars of Brabham and Williams, with the title going to the former's Brazilian, Nelson Piquet. The realists may have quietly accepted that the V8's days were numbered but no one in FOCA was going down without a fight. Rejoining their ranks would be a familiar name not averse to confrontation.

LAUDA 2

When Niki Lauda walked away from Formula 1 at the end of 1979, it seemed he was done with motor racing for good as the establishment of his airline took priority. When the subsequent advance in F1 car performance intrigued Lauda, Ron Dennis did not miss the opportunity to offer a test drive, the result of which was the former champion's signature on a McLaren contract for 1982.

Lauda was not so quick with the pen, however, when it came to putting his moniker on a recently introduced Superlicence. He was the only competitor to spot a clause that would effectively tie a driver to his employer in the manner of football players and

their clubs. Lauda not only informed his fellow drivers of the potentially crippling restriction, he encouraged them to go on strike at the first race in South Africa.

The key to this plan would be ensuring the drivers did not come under the persuasive and possibly threatening influence of their team managers. To that end, Lauda parked a bus by the circuit gate, ready to whisk the drivers out of reach before anyone else realised what was happening. In an unprecedented move while negotiations took place, the drivers stayed overnight in a temporary dormitory rigged up in a hotel function room. For once Balestre and the teams were united in fury. But the drivers won the day despite the imposition of a fine that was regarded as no more than a slap on the wrist.

Lauda also meant business once he pulled on a crash helmet - as he proved by winning the third race of his comeback and putting himself in the reckoning for a championship that no one seemed to want to win. In a bewildering season, boycotts and bitterness would leave their mark.

At the second race of the season, in Brazil, the first two finishers, Piquet and Keke Rosberg, were disqualified for exploiting another loophole - this one topping-up liquids in the car after the race had finished. Ferrari and Renault accused the British teams - Brabham (Piquet) and Williams (Rosberg) of cheating by running their cars under the minimum weight limit in the race and then adding the liquids to satisfy the weight requirements.



Left: Didier Pironi leads Gilles Villeneuve during the 1982 San Marino Grand Prix.

FISA decided to make such a practice illegal. That led to a boycott, by most of the British teams, of the San Marino Grand Prix at Imola. Only 14 cars took part, among them the Ferraris of Gilles Villeneuve and Didier Pironi. They had the race to themselves and Pironi won. Villeneuve was incensed. He said he had been duped by his team-mate and he swore never to speak to the Frenchman again. He never did.

Two weeks later, the supremely gifted French-Canadian was dead. The accident during the final moments of practice for the Belgian Grand Prix was the result of Villeneuve's determination to beat Pironi and the need to keep the throttle floored while using sticky qualifying tyres. Back off and your chance was gone; the tyres would not be good enough for another quick lap. Villeneuve had come across a car going slowly in the middle of the track. In that split instant of decisionmaking, both drivers had moved to the right.

This tragedy should have pulled the politicians up short by placing their petulance and bickering in a different light. It did anything but, particularly when general opinion was that Villeneuve was a racer who knew the risks. An exception was Professor Watkins, the man charged with improving circuit medical facilities from the equivalent of a first aid worker with pack of bandages. Watkins had got to know Villeneuve well and, while he understood and enjoyed Gilles's sense of joie de vivre behind the wheel, he was incensed by the hazards presented by qualifying tyres and the authorities' preference for political points over safety.

That said, there had been progress. One of the more sensible acts performed by FISA and FOCA had been the staggering of grid positions with cars no longer starting side-by-side. To see fair play and bring uniformity to the most highly charged moments of the Grand Prix weekend, Derek Ongaro, a phlegmatic Englishman, had been appointed as official starter. The use of the national flag had been replaced by starting lights, thus eliminating farcical scenes in the past when local dignitaries frequently caused chaos, particularly when put under pressure by the revving engines of the front-row starters.

This had occurred in the 1971 British Grand Prix when an official from the Royal Automobile Club, menaced by the pole position Ferrari of Clay Regazzoni edging forward while urgently blipping his Ferrari flat-12, had raised the flag – and then hesitated. Regazzoni then dabbed his brakes. Other drivers, watching the Ferrari rather than the flag, had begun to move forward and then stopped – only to be hit from behind by those responding to the flag when it actually fell. Apart from light damage to machinery, no serious harm had been done on this occasion.

That had not been the case at Monza in 1978 when the official panicked and started the race even though the rear half of the grid was not yet in position. The rolling momentum gave the back-markers a flying start and this led, moments later, to the multi-car collision that resulted in Ronnie Peterson suffering what proved to be fatal injuries.







Far Left: Didier Pironi was leading the championship in 1982 before serious injuries curtailed his motor racing career.

Left: Keke Rosberg was crowned World Champion despite winning just one Grand Prix in 1982.

Following the sadness of Belgium, the 1982 season stumbled on and the final laps of the next race, in Monaco, at least brought some light relief. Successive leaders either crashed or stopped and the eventual winner, Riccardo Patrese, having spun, took victory without knowing it. On a new street circuit in Detroit, the reigning champion, Piquet, failed to qualify but won in Montréal seven days later where a terrible accident on the start line claimed the life of Ricardo Paletti, an Italian novice.

Lauda won the British Grand Prix but second place for Pironi put the Frenchman in a strong position for the championship. However, this crazy year had a further shock in store. During practice for the German Grand Prix, Pironi crashed heavily and suffered leg injuries severe enough to keep him out of racing for good. The race provided an emotional victory for Patrick Tambay, a Frenchman drawn from certain obscurity by Ferrari as the replacement for Villeneuve. And just for good measure in front of the television cameras, Piquet indulged in fisticuffs with back-marker Eliseo Salazar after his leading Brabham had been edged off the road by the Chilean's Ford.

By the time the season had finished there had been 11 different winners, no fewer than five of them scoring maximum points for the first time. Keke Rosberg was declared World Champion even though the Williams driver scored just one victory, the Swiss Grand Prix - which was held at Dijon in

France. Meanwhile, there were signs on the political front that peace might be in danger of holding.

WHEELSPIN IN EVERY GEAR

Despite their objection to turbos, the FOCA teams had no alternative but to gradually and reluctantly abandon normally-aspirated engines. The resulting marriage with chassis barely capable of handling such explosive power resulted in some of the most spectacular F1 cars ever seen.

Honda (V6), Alfa Romeo (V8) and TAG (a V6 manufactured by Porsche for McLaren) may have joined the turbo revolution but the most potent unit actually had the fewest cylinders. BMW's M12/13 was based on their four-cylinder production unit. Such a humble source would be transformed into a racing grenade thanks to special toluene-based fuel and 3.5 bar boost.

Taming this 1200 bhp rocket ship during qualifying at Monaco was terrifying. Drivers had to deal with wheelspin in every gear on the steep climb from Ste Devote and somehow contain the projectile as it reached 175 mph on the barrier-lined approach to Casino Square. Subsequent wide-eyed expressions in the cockpit said everything about the emotional mix of surging adrenaline and relief that qualifying tyres were only good for a single lap. Not that the engine in this volatile state of tune would

Opposite: Riccardo Patrese's Brabham heads the Renault of Alain Prost and Didier Pironi's Ferrari at Monaco in 1982. All three would lead at some stage before Patrese was declared the surprise winner.



Far Right: Ayrton Senna came close to winning the 1984 Monaco Grand Prix in his debut season driving for Toleman-Hart.

Right: Niki Lauda proved he had lost none of his skill by becoming World Champion for a third time in 1984.

> have lasted much longer. The performance would be reduced to a "mere" 900 bhp for the race.

The pursuit of power at the expense of reliability meant regular truckloads of engines from Munich each race weekend. BMW, for instance, reportedly built no fewer than 600 units for Brabham in a single season of racing, practice and testing. It was Eighties excess in its most profligate and spectacular, flamespitting form.

Lauda was one of the first to admit he found difficulty in adapting from the all-or-nothing singlelap performance of qualifying to the detuned engine needed to last the race. For 1984, Lauda was joined at McLaren by Prost, hungry to win the championship after being defeated the previous year by Piquet and his Brabham-BMW. Lauda quietly accepted that Prost was quicker on a lap-for-lap basis during qualifying but, typically, the Austrian focused on endurance and extracting the maximum throughout a 192-mile race. He beat Prost to the 1984 title by half a point, the smallest margin ever.

With the greatest respect to the Eighties champions thus far, the one thing lacking was an enigmatic star capable of catching a sports editor's eye. That icon in the making emerged in 1984 from the spray at Monaco at the wheel of a car funded by a transport company and powered by a four-cylinder turbo made in a humble workshop in Essex.

Had the Monaco Grand Prix lasted one more lap. Ayrton Senna would have won his first Grand Prix in



a Toleman-Hart. The fact that he complained about the race being stopped laid down several markers for a man who would create headlines as frequently as he would claim pole positions and win races.

His record book opened with an outstanding win (appropriately, in the rain) in Portugal in 1985, but the full import of a personal intensity to match this brilliance would not be felt until 1988, when Senna moved to McLaren. Now he was head-to-head with Alain Prost, arguably the driver of the decade and, by extension, the man Senna wanted to beat more than any other. In fact, he wanted to grind the Frenchman into the dirt. And be seen to be doing it.

Meanwhile, another character had emerged, totally different to Senna in terms of culture and personal circumstance, and yet a frequent thorn in the Brazilian's side.

On the day Senna hit the headlines for the first time in Monaco, Nigel Mansell had hit something more substantial when he crashed his Lotus out of the lead. Blame being placed on a slippery whitepainted line on the road was greeted as yet another dodgy defence written into his expanding book of excuses. But when Mansell got himself into a Williams-Honda, the Englishman's innate speed, driven by bloody-minded determination, suddenly had a reliable and competitive outlet. When Mansell won his first Grand Prix in late 1985, it added against all previous odds - the Brummie's name to the championship betting for the following year.



Left: Nigel Mansell leads his Williams-Honda team-mate, Nelson Piquet, during the 1986 Hungarian Grand Prix.

The world began watching with fascination, the media picking up on this and raising the sport's profile in the process. In addition, the prospects for Brands Hatch had never seemed brighter. Continuing to alternate with Silverstone as the host of the British Grand Prix, the Kent circuit enjoyed the limelight when Mansell dramatically won there in July 1986. A few months previously, the mood had been buoyant as Brands Hatch announced a new owner. John Foulston, a motor racing enthusiast and a wealthy man thanks to his success in the burgeoning computer world, had just bought Brands Hatch, Oulton Park and Snetterton from Eagle Star Holdings (the parent company of Grovewood Securities, the previous owner) for £5.25 million. The future of these circuits was therefore secure and the British Grand Prix would continue to be the financial cornerstone. Or so it seemed.

A week later, FOCA (in reality, Bernie Ecclestone, who was responsible for every deal) announced they had signed a deal with Silverstone to run the British Grand Prix for five years. In the absence of evidence to the contrary, it seemed Brands Hatch had been closed out by Ecclestone - because he could. It would mark the end of the popular circuit as a Grand Prix venue and, ironically but not untypically, signal the start of many decades of wrangling between Ecclestone and Silverstone.

Meanwhile, on the other side of the world, a welcome addition to the calendar was in line to host a truly dramatic finale to the 1986 season. Twelve months before, the first-ever World Championship race in Adelaide had enticed just one journalist from so-called Fleet Street to travel to Australia, largely because the title had already been settled in Prost's favour. In 1986, Mansell's presence in the three-way title shootout attracted every national newspaper and media outlet worthy of a credential.

Having previously limited coverage of a Grand Prix to highlights late on race night, the BBC went live from South Australia in the early hours of Sunday morning. The dramatic pictures were immediately guaranteed to become motor sport classics as Mansell's championship went the way of air exploding from a rear tyre at 185 mph. With the BBC Sports Personality of the Year following a few weeks later, Mansell was a shoo-in to become the first winner from motor sport since Jackie Stewart 13 years previously. It more or less guaranteed a sell-out at Silverstone in 1987.

With the rare security of a five-year contract for the British round of the championship, Silverstone had accelerated an investment programme that included further alterations to make the high-speed circuit safer. In the wake of the Scheckter-inspired shunt in 1973, the fast profile of Woodcote corner had been altered by a chicane that was never popular from the start. A better solution was not found until 1987, when a dog-leg left some distance before the corner and allowed drivers to accelerate through



Right: Ayrton Senna, having won his first Grand Prix in 1985, was in the running for the 1986 championship with his Lotus-Renault.

the original Woodcote profile and do away with the disliked chicane.

As far as Mansell and his Williams team-mate, Piquet, were concerned, the actual track layout mattered less than establishing which of the two was quicker. The Williams-Honda was adjudged to be the best car of 1987 but, because the team's drivers were at war with themselves as well as the competition, the points table prior to Silverstone showed Senna (still driving for Lotus) to be one point ahead of McLaren's Prost, with Mansell and Piquet third and fourth respectively.

Mansell had hammered Piquet the previous week in the French Grand Prix. Stung by comments that he was past it and should retire, Piquet took the unusual step of holding a press conference to refute such speculation. As a casual aside, he happened to mention that he had won two World Championships whereas Mansell had lost one. It was the truth - but it hurt. Piquet would pay dearly for such a remark later in the weekend.

After an initial intervention by Prost, the Williams drivers - Piquet leading Mansell - left the rest standing. Mansell's race seemed to have been lost when a balance weight became detached from a rear wheel. A stop of 9.5 seconds had all four wheels changed, Mansell rejoining 28 seconds in arrears. There were 29 laps remaining. In the space of the next eight laps, Mansell only pulled back five seconds. Game set and match to Piquet. Not quite.

Mansell thrashed his car. At the point where the gap reduced to 11.6 seconds, Piquet's Goodyears began to lose grip. There was no need for a stopwatch now; the crowd could see it for themselves. With 10 laps remaining, the gap was 7.6 seconds. The fastest lap of the race brought the deficit down to 3.9 seconds, then 2.0 seconds, 1.4 seconds and, starting lap 63 with two to go, 0.8 seconds. The only thing which would stop Mansell now was the effect this unbelievable pace may have had on the car's fuel consumption. With each turbocharged car restricted to 195 litres, Mansell's fuel read-out on the dashboard was reading a big zero. No point in worrying, he thought. Press on!

Mansell shadowed Piquet as they reached 180 mph on Hangar Straight. Piquet stayed right, thus blocking any attempt Mansell might make to overtake on the inside going into Stowe. Mansell suddenly darted left. It was the oldest trick in the book – but Piquet bought the dummy. No sooner had he moved left than Mansell, hard on the power, swooped right and went for the inside going into Stowe. They almost touched as Piquet tried desperately to defend. But Mansell was through. Would his fuel last the remaining one and a half laps? Starting the final one, Mansell's Honda V6 hesitated - and then picked up again. To the delight of a crowd high on an afternoon of top racing, Mansell reached the chequered flag ... and then stuttered to a halt halfway round his slowing down lap. It took an aptly



named Rescue Vehicle to scoop Mansell from the midst of his admirers.

Piquet had the last laugh as, four months later, Mansell crashed on tricky piece of the Suzuka track during practice for the Japanese Grand Prix. He injured his back and missed the final two races, so, at that moment, standing idly in the pits Piquet, became champion for a third time. This turned out to be Mansell's last opportunity to become World Champion for some time as the Senna-Prost-McLaren-Honda combination began to exert its stranglehold.

Having originally championed the turbo as a matter of political expediency, Balestre found himself in the tricky position of back-pedalling in order to stop this lethal performance advance with a ban at the end of 1988. With McLaren winning 15 of the 16 races in 1988, a period of potential disinterest was actually accelerated in the opposite direction by increasing friction between their drivers and a sport that had become more popular than ever.

OVERSUBSCRIBED

An entry of 39 drivers for the first race of 1989 in Brazil brought the need for pre-qualifying. This was the only means of whittling down the field to 30 runners attempting to qualify for the 26-car grid. Having raised the £10m necessary for a season and spent 18 months in preparation, a new team, Onyx,

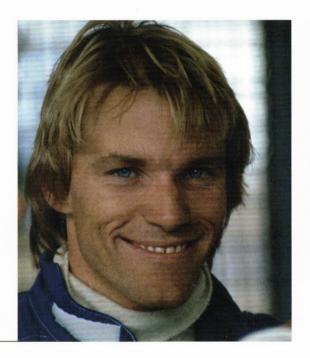
were on their way back to West Sussex after just one hour's action before the vast majority of spectators had reached the Rio de Janeiro track early on the first day. Such a brutal regime for the newcomers would be repeated all the way to Mexico at the end of May, when Stefan Johansson finally got into a race, only to retire the Onyx-Ford V8 with broken transmission after 16 laps running impressively in the midfield.

Meanwhile, Nigel Mansell had joined Ferrari. The new car, with a revolutionary paddle-shift gear selection, had been so troublesome that Mansell didn't expect to finish the first race and booked himself on an early flight home from Brazil. He missed the plane after winning, then added further colour, in every sense, by cutting his hands - as only Nigel could - on the ornate trophy.

Mansell might have become a serious contender and interfered with McLaren hegemony if his car had been more reliable, retiring seven times. Even worse, at Estoril in Portugal, he overshot his pit in an overcrowded pit lane, reversed illegally, failed to see the subsequent black flags and collided with Senna. Mansell was banned from the next race and immediately threatened to guit. There was never a shortage of stories when "Our Nige" was about.

The ever-present Balestre was behind a severe punishment made even more controversial in Jerez a week later when FISA handed down a mere \$20,000 fine for Senna's more serious failure of ignoring yellows at the scene of an accident during practice.

Above: Nigel Mansell's move to Ferrari in 1989 brought race wins, but no championship.



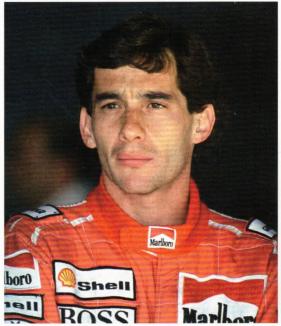
Far Right: Ayrton Senna would win his first World Championship with McLaren in 1988.

Right: Stefan Johansson was one of the many young drivers fighting to get into the over-subscribed Grands Prix.

> The inconsistency was no surprise since it had come from a man who had huffed and puffed his way across the track after the start of the British Grand Prix at Silverstone, Balestre had failed to notice that Nicola Larini, having dashed into the pits to attend to a loose mirror, would be steaming through Woodcote in attempt to catch up. The Osella driver lost favour with many by taking urgent avoiding action to miss the blustering President.

> If anything, surviving such a moment seemed to embolden Balestre, particularly in Japan when the Prost and Senna rivalry reached a new and scary level of intensity. The relationship had turned sour at Imola in April when, according to Prost, Senna had gone against an agreement designed to stop the McLaren drivers racing each other unnecessarily and jeopardising equipment and points at such an early stage of the season. From then on, it was every man for himself.

> By the time they reached the penultimate round in Japan, Prost declared that he was no longer willing to put up with what he saw as intimidation when challenges from Senna amounted to "either you let me through or we crash". Having been in front from the start and seemingly having the measure of the Brazilian, Prost went for the latter option when Senna made a late attempt to overtake. With what amounted to an aggressive attack and a clumsy defence, they managed to collide while disputing both the lead and the championship. Prost retired on the spot; Senna eventually continued and won the race.



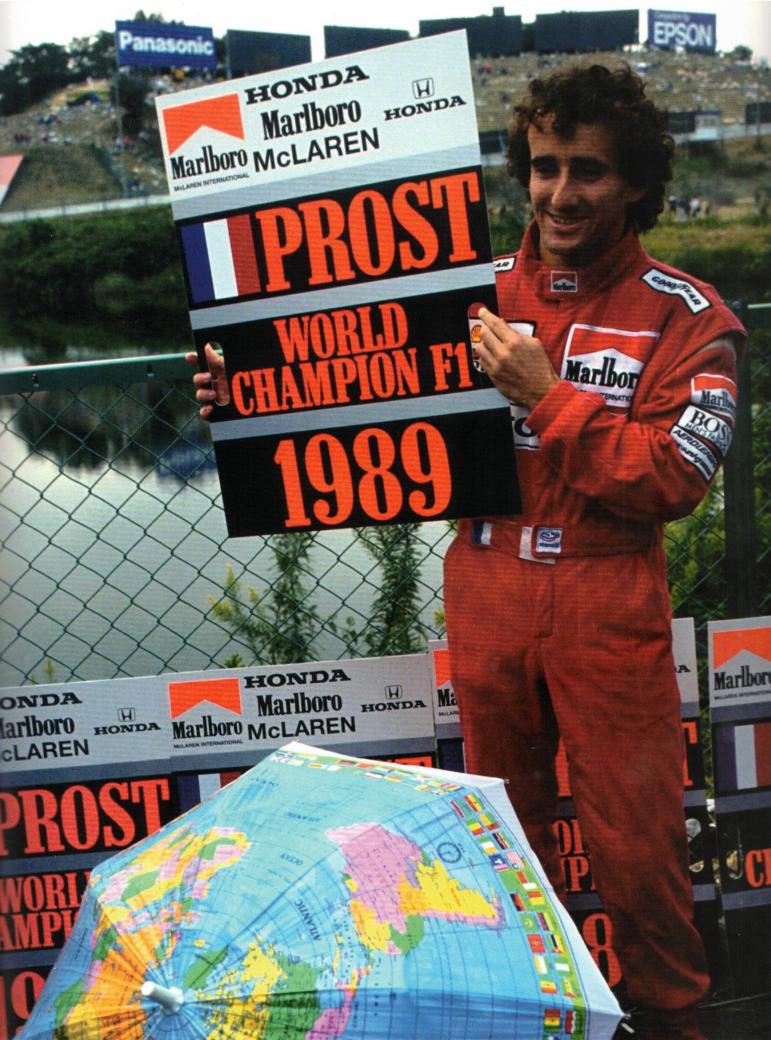
Confusing the role of the legislature with that of the judiciary, Balestre waded in with the finesse of a bar-room bully and involved himself in a stewards' enguiry. It found Senna at fault and disqualified him, thereby handing the championship to Prost. Not surprisingly, this triggered a massive reaction.

The uproar would continue through and beyond that final round in Australia; a race, incidentally, which should never have started in heavy rain and ended for Senna after 14 laps when, driving like a man possessed, he smashed into the back of a backmarker hidden by the spray.

This brought the Eighties to an untidy but somehow appropriate end for a decade brimming with bravado, blatant political intrusion, bad judgement and brilliant racing. The eventual division of financial and political power to everyone's satisfaction allowed Ecclestone to make the beginning of a personal fortune. Balestre, meanwhile, could strut his stuff, but without unduly interfering with the reshaping of the F1 image from a band of grubby racers to a slick show that turned up on time with a full complement of professionally-presented teams.

Politics, however, would always prevail. The final legacy was a lingering threat that Senna, at loggerheads with the administration and just about everyone else, would not turn up for the first race of the Nineties. Part of this was due to the only consistency across the previous 10 seasons being the irrational inconsistency of FISA's man in a white suit.

Opposite: Alain Prost won his third World Championship under controversial circumstances at Suzuka in 1989.









Previous pages: The 1981 World Championship was settled on a track laid out in a hotel car park in Las Vegas. The title contenders, Carlos Reutemann (Williams #2) and eventual champion Nelson Piquet (Brabham #5) follow the Williams (#1) of Alan Jones into the first corner.

Opposite: Alfa Romeo rejoined the list of major motor manufacturers in Formula 1, having dominated the early years of the World Championship. Bruno Giacomelli qualified on the second row at Monaco in 1982.

Left: Ron Dennis and McLaren designer John Barnard (left) advanced Formula 1 technology with a carbon fibre chassis. John Watson (centre) won the 1981 British Grand Prix.

Below: Keke Rosberg, driving for Williams, was one of 11 different winners in his championship year, 1982.





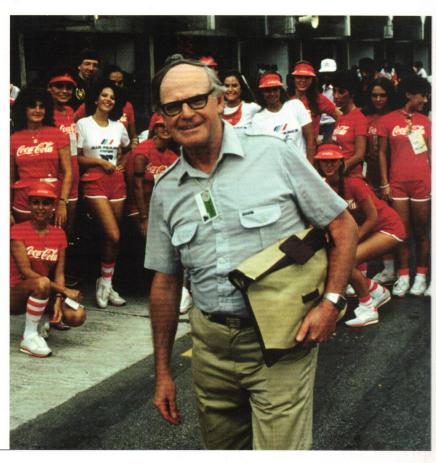


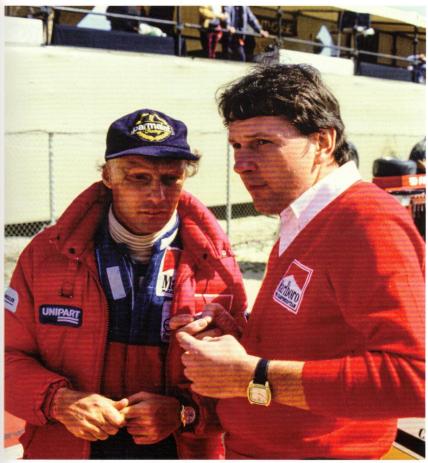
Opposite: Nelson Piquet won his second World Championship with Brabham-BMW in 1983.

Right: Professor Sidney Watkins was responsible for a much-needed uplift in medical back-up and facilities at the race tracks.

Bottom right: The circuit through the streets of downtown Long Beach was a popular venue for a Grand Prix in the United States.

Below: Niki Lauda's working relationship with McLaren designer John Barnard brought them a World Championship in 1984.







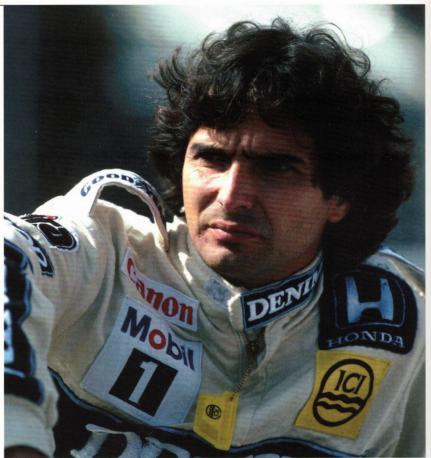


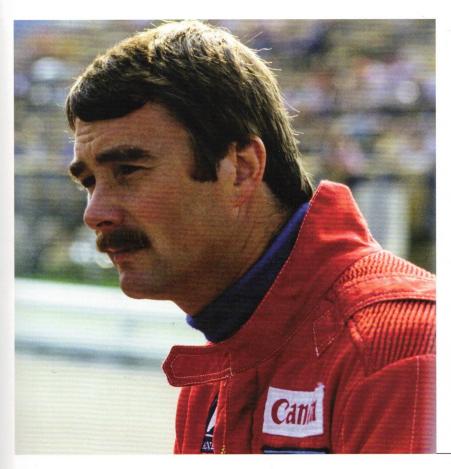


Above: Riccardo Patrese raced for Brabham in 1982/83 and 1986/87, winning two Grands Prix.

Top right: Bernie Ecclestone's commercial influence continued to grow in the 1980s.

Right: Nelson Piquet won championships with Brabham and Williams in the 1980s.





Left: Nigel Mansell enjoyed many eventful races with Williams between 1985 and 1988.

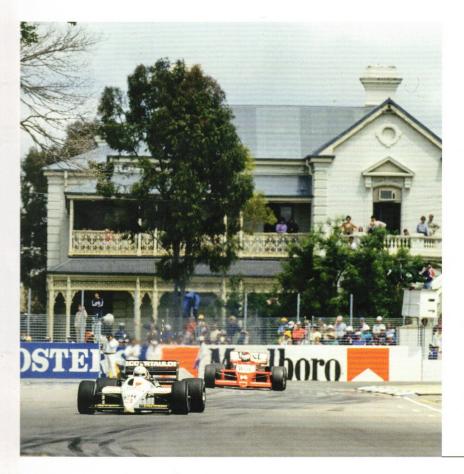
Following pages: Formula 1 visited an Eastern Bloc country for the first time in 1986. The Lotus of Ayrton Senna (bottom foreground) prepares to start from pole at the Hungaroring. The race was won by the Williams of Nelson Piquet, starting from the outside of the front row.

Below: Driving a McLaren-TAG Porsche, Alain Prost won the World Championship in 1985.





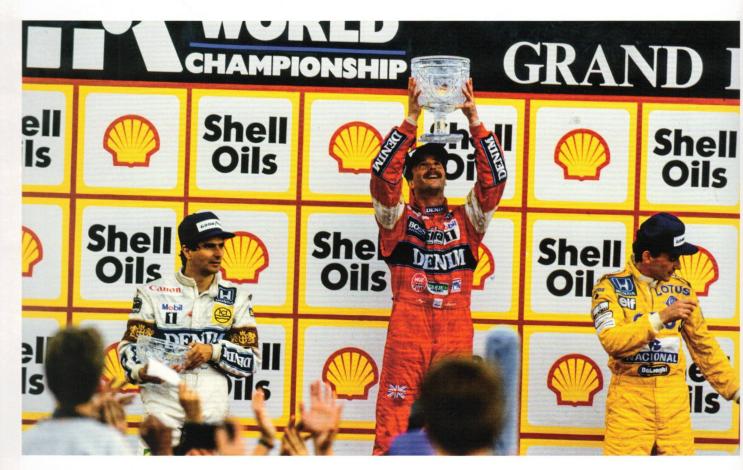




Opposite: Suzuka was the scene of many confrontations between Alain Prost (seen leading the McLaren duo in 1988) and Ayrton Senna.

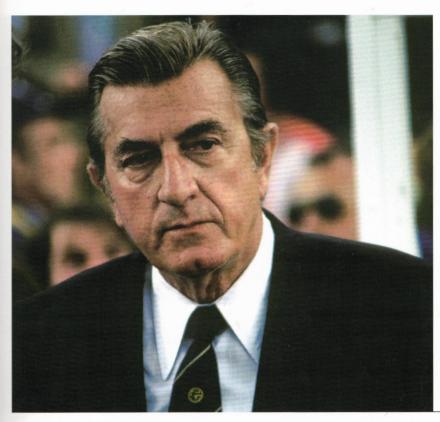
Left: The street circuit in Adelaide was a welcome addition to the calendar. Martin Brundle's Tyrrell and the Zakspeed of Jonathan Palmer scrap in the midfield during the 1986 Australian Grand Prix.

Below: Nigel Mansell celebrates a spectacular win over Nelson Piquet in the 1987 British Grand Prix. The Williams drivers are joined by Ayrton Senna (right).





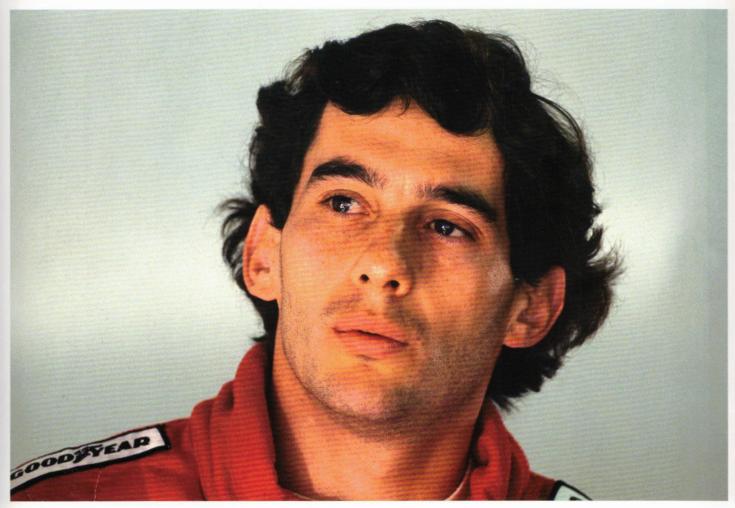




Opposite: Nigel Mansell scored a surprise win on his debut for Ferrari in the 1989 Brazilian Grand Prix.

Left: President Jean-Marie Balestre continued to make his presence felt right to the end of the decade.

Below: Ayrton Senna produced some mesmeric performances with McLaren.







Left: Small teams formed the bedrock of Formula 1. The Onyx of Stefan Johansson battles for 19th place with Luis Sala's Minardi during the early stages of the 1989 Hungarian Grand Prix.

Following pages: Tense moment as Alain Prost, about to become World Champion, watches team-mate Ayrton Sen bring his McLaren into the pits at Suzuka following a collisi between the two during the 1989 Japanese Grand Prix.







CHANGING OFTHE GUARD

When he died in 1994, Ayrton Senna had amassed 41 wins in all − 21 in the 1990s − and taken the first two championships of the decade. Alain Prost scored 12 wins in the '90s and retired after winning his fourth title in 1993, the year Damon Hill began a run of 22 career victories. Michael Schumacher was the decade's most decorated winner with 35 Grands Prix™ and two championships. There was much more to come.

HIP

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5. CHANGING OF THE GUARD

Nothing seemed to have changed. The Nineties opened with a row between Jean-Marie Balestre, president of motor sport's governing body, FISA, and Ayrton Senna - whose precise status remained unknown. Senna, having been fined \$100,000 for dangerous driving in the Japanese Grand Prix, inflamed the tension by claiming that FISA had manipulated the 1989 championship in favour of Alain Prost. Showing a lack of statesmanlike calm, Balestre responded by citing further examples of Senna's alleged bad behaviour behind the wheel. When McLaren paid the fine on behalf of their driver, few believed this would be the end of animosity that had developed a personal edge.

Before he could take part in the opening race of the 1990 World Championship in the United States, Senna would require a licence – issued by FISA. Senna said he had no intention of racing for anyone unless Balestre retracted his allegation. On 16 February, four weeks before the race in Arizona, FISA stated "officially and categorically" that the McLaren driver was out of the championship. An hour later, the statement was retracted and Senna given the all-clear, an apology having been received by fax from Brazil. Even then, no one - McLaren included - could be sure the Brazilian would actually put in an appearance. This farce in several acts continued right up to the point where Senna arrived in Phoenix, signed for his licence – and then won the Grand Prix as if nothing had happened.

McLaren-Honda appeared to be set for another year of domination. That theory began to crumble in Brazil. Senna collided with former Honda team-mate Satoru Nakajima while leading. He then had to look

on from the third step of the rostrum as his nemesis Alain Prost received the winner's trophy for his new employer, Ferrari. Despite winning at Monaco, a sequence of events would continue to conspire against Senna. Prost, meanwhile, was putting together an impressive run - much to the angst of his team-mate, Nigel Mansell.

The 1990 season thus far had been nothing short of a disaster for the Englishman, who had started the championship by assuring his British fans that this was his best chance of winning it. That seemed to be going the way of the dwindling power he alleged his engine appeared to have as Prost won three races to Mansell's none, retirement from the French Grand Prix



Right: Ricciardo Patrese interrupted the Senna/Prost hegemony by winning the 1990 San Marino Grand Prix for Williams.





Right: The shattered remains of Martin Donnelly's Lotus at Jerez in 1990.

being his fourth in seven races. This was not a good omen going into the British Grand Prix.

Apart from satisfying the home hype, Mansell knew the Silverstone race would represent his last opportunity to stay in touch with Prost and Senna at the top of the championship table. It's not difficult to imagine Mansell's mood when gearbox trouble intervened and he lost the lead to Prost. When he coasted to a halt at Copse, Mansell vacated the car, tossed his gloves and balaclava into the midst of the deeply disappointed crowd, expressed his view to the BBC television reporter that life wasn't fair and trudged back to the Ferrari motorhome. Not long after, as Prost received his trophy amid scenes of British pomp and ceremony, Mansell was stealing headlines in a quiet corner of the paddock as he unexpectedly announced his intention to retire at the end of the season.

There followed a couple of lacklustre races from Mansell but he perked up after his first win of the season in Portugal. Typically, however, the result had emotional repercussions, particularly as, according to Prost, Mansell drove with zero regard for the championship aspirations of his team-mate. The mood would improve in Spain as Prost led a Ferrari one-two on a day when Senna registered his first retirement in eight races. But the weekend in Jerez would be better remembered for an accident that wrecked the career of a promising young driver and a brought shocking reminder - not that it was

needed - of motor sport's ever-present danger to life and limb.

Martin Donnelly was into his first full season of Formula 1, driving for Lotus. The team from Norfolk may have seen much better days but, for the 26-yearold Ulsterman, this was an opportunity. Going for a quick lap during qualifying, Donnelly's left-front suspension failed just as he flicked the yellow car into a fast right-hander. With no steering, the Lotus-Lamborghini ploughed straight on and disintegrated against a metal crash barrier mounted close to the edge of the track.

The irony was that the fragmenting chassis allowed Donnelly a means of escape as his body was flung sideways, free of a cockpit that seconds before had fitted him like a glove. The violence of the impact tore the bulkhead (to which the upper seat belt mounting points were attached) clean away from the car, exposing the fuel bag-tanks. The absence of a fire was one miracle. The other was that Donnelly was still alive, but only just.

This being near the end of the lap, it took the medical car the best part of two minutes to reach a scene of devastation so bad that Professor Sid Watkins could not identify the car. In any case, his priority was the inert form lying in a foetal position with the left leg hideously bent. Looking inside the visor, Watkins could see Martin's face was blue and clearly short of oxygen. With his accompanying Spanish anaesthetist, the Professor put a suction



tube down one nostril and an oxygen tube in the other.

The next job was to remove the helmet; never easy to do in the conventional manner when a driver is unconscious. Using a special pair of scissors with a blunt end of one blade to allow access beneath the helmet strap but without penetrating the flesh, Watkins sawed his way through the strap, removed the helmet and realised Donnelly was choking on his tongue. Running a finger around Donnelly's tightly clamped teeth, Watkins found a gap that allowed him to pull the tongue forward. The first moment of extreme difficulty had passed.

More would follow as Donnelly suffered kidney failure not long after reaching the London Hospital and, just as threatening four weeks later, a burst artery in his left thigh. The latter came close to forcing amputation. The leg, on Watkins' insistence, may have been saved but the incident had a long-term effect when dried blood, coupled with a lengthy period of inactivity, caused Donnelly's upper thigh muscle to stick to the bone. While everything else would eventually cure itself to remarkably good effect (a miracle in itself considering, as Professor Watkins said, "we nearly lost him on several occasions"), that snared muscle would cause Donnelly more frustration than anything he had ever known and ultimately prevent a return to the F1 cockpit. Donnelly's stock had been rising throughout that debut season. Split times during the fateful lap showed that, had he

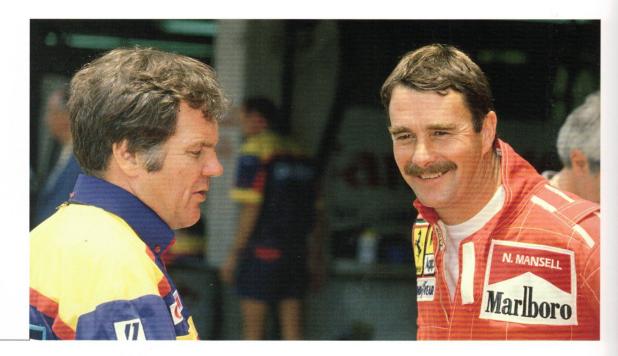
completed it, he would have qualified on the third row; his best grid position that year.

During the resuscitation process on the race track, Watkins was unaware that Senna had vacated his McLaren and gone straight to the scene. There he would witness, probably for the first time, the terrible devastation that can be wrought when a F1 car goes out of control. Ayrton was ashen-faced as he walked back to the McLaren motorhome, where he sat quietly on his own for several moments and gathered his thoughts. Then he went out and put the McLaren on pole. This was typical for a man of puzzling contradictions; deeply caring and kind one minute; capable of compelling and sometimes questionably ruthless acts the next.

When the season reached its penultimate round in Japan, the championship had boiled down to Senna and Prost. Senna, with Prost's agreement, had asked early in the week to have pole position moved to the cleaner side of the track; a significant advantage on the downhill run to the first corner. When officials (prompted heavily by President Balestre) turned down the request, Senna's anger (he had subsequently won pole) was multiplied when reference was made in the drivers' briefing to the collision between Senna and Prost at the previous year's race. If that coming together had been seen as controversial, it was child's play compared to what happened next.

In the reverse of 1989, it was Senna who had come to Japan with a points advantage. On the charge to

Above: Trouble looming as Senna's McLaren attacks Prost's leading Ferrari just after the start of the 1990 Japanese Grand Prix.



Right: Nigel Mansell, driving for Ferrari in 1990, was about to resume his relationship with Williams and Patrick Head.

the first corner, Prost took the lead from the more advantageous starting position – and Senna drove into the back of the Ferrari. Both retired instantly, thus handing Senna the title. There was no doubt that Prost had left the door open - albeit briefly. The argument was whether or not Senna was entitled to aim for a narrow gap on the assumption that Prost would avoid contact because he had to finish the race.

The early elimination of the championship contenders had left the way clear for Mansell to add to his solitary win thus far. With a comfortable lead in his pocket, Mansell made a stop for fresh tyres – only to have the Ferrari snap a driveshaft as he accelerated away with a little bit more enthusiasm than was perhaps advisable.

This was not a sad final act close to his expected retirement. Three months after the emotional declaration at Silverstone, Mansell had announced that he had changed his mind, aided by an offer to rejoin Williams (for a handy £4.6 million) and thus to drive what would eventually prove to be one of the most technically sophisticated cars of this or any other generation.

RED 5

Halfway through 1990, Patrick Head had made a mental note, as shrewd engineers do, of the potential shown by Leyton House thanks to the interesting car being run by this small, impoverished team. Head

was particularly impressed by the aerodynamic work of Adrian Newey, who was relatively unknown in Formula 1 circles. Showing typical practicality, Head invited Newey to become chief designer at Williams, focussing on aerodynamics. Head would look after the transmission and various complex systems permitted by the regulations at the time. Mansell, meanwhile, showed that he had lost none of his speed or motivation during a winter test at Estoril as he immediately took the 1989 Williams around the Portuguese circuit faster than it had ever gone before.

Head was working on a semi-automatic gearbox for their 1991 car, the Williams-Renault FW14. The electronically controlled and hydraulically activated transmission would provide a few teething problems in the early races. By the time they reached the fifth round in Canada, the car was sorted. Mansell led from the start and never looked like being troubled. He clearly wished to savour this rare moment as he went into the final lap, 47 seconds ahead of his old rival, Nelson Piquet.

The hairpin at the far end of Circuit Gilles Villeneuve was flanked by grandstands. As Mansell arrived in the horseshoe, the crowd rose as one, the leader waving in happy response. He continued acknowledging the rowdy reception while flicking the lever behind the steering wheel and changing down to first gear for the hairpin. In the process, he allowed the engine revs to drop too far. The



Left: At the wheel of "Red 5", Nigel Mansell thrilled the home crowd at Silverstone in 1992 by winning the British Grand Prix for Williams.

transmission baulked between gears and there was insufficient charge remaining in the system to enable the hydraulics to select a gear. The engine stalled and Mansell sat in silent agony as the Benetton of the disbelieving Piquet came by and, between barely stifled laughs, headed for the chequered flag.

The embarrassment was soon forgotten as Mansell and Williams began a sequence of wins, albeit too late to prevent Senna from taking a second title. Enough had been done, however, to give Williams hope going into 1992 with their updated car. This was more than a progressive piece of finetuning; FW14B would set new standards as the combination of Newey and Head got their creative act together, particularly when developing so-called active suspension that effectively controlled the car's ride height at its optimum throughout a lap, no matter what circuit. As had been the simple dictum with pace-setting designs from Lotus and Williams in previous decades, FW14B produced more downforce than any other car and therefore went faster.

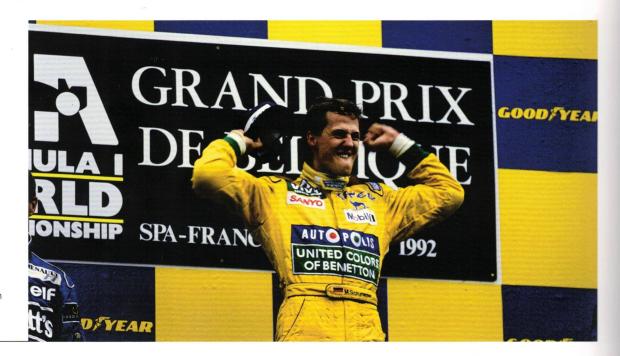
The difference this time was that the Williams needed a driver of Mansell's physical strength, bravery and bloody-minded determination to push it to its maximum. He proved it by winning the first five races of the 1992 season and would have won a sixth at Monaco had a wheel not worked loose. He made up for it in France, a seventh victory, then delighting the partisan crowd at Silverstone as they cheered on "Red 5", the handle by which Mansell had become

affectionately known thanks to the colour of the competition number carried prominently on the nose of his Williams.

Much had changed at the British track. As soon as the Formula 1 teams had moved out after the 1990. Grand Prix, the bulldozers had moved in. The increase in speeds - Mansell had lapped at an average of 158 mph to take pole in 1990 – had continued to cause alarm. Since neither the teams nor the governing body showed any inclination to slow down the cars, the circuit had to be adapted to cope.

The plans were met with dismay since it was believed the classic venue would be robbed of its key ingredient of fast and challenging corners. Silverstone, critics said, would become sanitised and boring. It turned out to be anything but.

The track's essential character was actually enhanced. The original Maggotts and Becketts corners were replaced by a series of curves of differing radii that generated high g-force while taken at speed. The 190 mph maximum on the following Hangar Straight was not affected and the tightening of Stowe, followed by a dip through Vale and a reprofiled Club, would add interest to what had previously been an uncomplicated run between the corners. The addition of an inner loop near the end of the lap meant that a new corner feeding it would be blind on the 175 mph approach. The drivers loved the new Silverstone, especially Mansell on a track tailor-made for the confidence-inspiring Williams.



Right: The first of many. Michael Schumacher celebrates his maiden F1 win at Spa-Francorchamps in August 1992.

> By 16 August, he had wrapped up the championship in Hungary with five races to go.

> This was the seventh Hungarian Grand Prix. The race and its surroundings had changed considerably since the first. There had been a certain amount of trepidation on both sides as Formula 1 ventured into an Eastern Bloc country for the first time and Hungary braced itself to receive this glitzy moving monument to meritocracy and western selfindulgence. Talk about coming at each other from opposite ends of the political and social spectrum.

F1 personnel, travelling by road and delayed at the Austro/Hungarian border for more than an hour while visas were laboriously checked, felt the need to inform their hotels of a late arrival in Budapest. In the absence of payphones, they were directed to a seedy room where a telephonist informed them that a call to Budapest, no more than a couple of hours away, was not possible. Even though they were trying to connect with the country's capital city, the rules said calls could not be made to anywhere more than 15 kms distant. In this way, officials could keep threatening communication and insurgency at bay. As it turned out, such a poor initial impression would not be representative of a humble country bending over backwards to accommodate this brash circus marching into town.

Restaurants (except one or two at the high end, very expensive and therefore very F1) were unmarked and gloomy. No one spoke English; the menu – a tatty sheet of paper - was unintelligible. Stew appeared to be the only choice. The wine was unspeakable. With such limited cuisine, it had been no surprise to learn that the opening of the first McDonald's two years later required a major police presence to control the customers. Formula 1 visitors happily joined a queue stretching round the block. A Big Mac had never tasted so good.

MAX MAKES HIS MARK

Jean-Marie Balestre had become President of the entire FIA in 1985, not just the sporting commission, FISA. Max Mosley, meanwhile, had taken over FISA's Manufacturers' Commission, a clear sign of calmer political waters as Bernie Ecclestone's cohort marshalled and looked after the interests of competition directors from all the major motor manufacturers with an interest in motor sport. This move gave Mosley a seat on the World Council eventually alongside Ecclestone, who would become vice president of the FIA. Changed times, indeed.

Apart from dealing with all aspects of international motor sport, Mosley had seen Balestre working at close quarters before and was not impressed. As a lawyer, Mosley had been particularly offended by the President's interference with the work of the stewards over the Senna incidents in Japan. By 1992, he had seen enough and thought about resigning. Then he became aware of a loophole



Left: Ayrton Senna scored a stunning victory for McLaren in the wet 1993 European Grand Prix at Donington. The Brazilian leads the Williams of Alain Prost, who would go on to win his fourth World Championship.

that could possibly lead to something far more interesting and influential.

Through poor personal organisation, Balestre had failed to ring-fence his position in the usual way. A lapse in administrative paperwork meant he would be running for re-election as FISA President on his own rather than being accompanied by other FIA delegates in the usual way as they had two more years to run in office. Instead of supporting each other to their mutual benefit and thereby assuring Balestre was unbeatable, the door was now open for Mosley to put his name forward in the knowledge that he would have support in a secret ballot from delegates who previously would not have dared to move against Balestre.

In the autumn of 1991, the FIA members voted 43 to 29 in favour of Mosley becoming President of FISA. Mosley then said that, rather than accept the four-year term, he would be judged on his merits and stand for re-election after a year. When that happened, Mosley went for broke and told Balestre he would stand for the full FIA presidency in late 1993. Just as shrewdly, Mosley said he would create a Senate and make Balestre President of that. Balestre agreed and did not stand again for the FIA presidency.

A few weeks after Mosley had become FISA President in 1991, he had gone to the Japanese Grand Prix and witnessed a meltdown in the postrace press conference. Using salty language, Senna

admitted he had been provoked by circumstances to deliberately take Prost off the road in the previous year's race. Having a subsequent quiet word with Ayrton – there was mutual respect between the two - would be nothing compared to what was waiting for Mosley during 1994, his first year as President of the FIA.

IMOLA 1994

Mosley had crossed swords with Alain Prost in 1992. The Frenchman, having fallen out with Ferrari before the end of the 1991 season, had spent the next year cooling his heels and working part-time as a pundit for French television. During one broadcast, Prost had criticised the governing body, a fact Mosley felt obliged to mention when Prost was on the back foot prior to a comeback in 1993.

As suppliers and major sponsors at Williams, Renault and Elf put pressure on the team owner to sign the unattached ex-champion. This did not sit well with Mansell, the new World Champion taking himself off to race in North America. Due to an administrative lapse, the Williams entry for Prost and Damon Hill in the 1993 championship had been filed too late. Everything was eventually smoothed over, Prost going on, virtually unopposed, to win a fourth world title.

In the summer of that year, Prost had been informed by Frank Williams that he wished to fulfil a



Above: Michael Schumacher and Benetton won the first two Grands Prix of 1994 while Ayrton Senna struggled with the Williams following his move from McLaren. long-held ambition to sign Senna. Based on previous experience at McLaren, Prost said he was more than happy to race against the Brazilian - but not in the same team. Prost announced his retirement (Renault and Elf paying the remaining fee on Prost's two-year contract) and Senna moved in after six years and three championships with McLaren. With Williams having dominated the previous two seasons, this had the appearance of a marriage made in Heaven. It would be defeated at the outset by a change in the F1 technical regulations for 1994.

The complex technology, which Newey and Head had used to such good effect, was banned. Active suspension would be no more. As Williams test driver, Hill had completed more than 25,000 miles of running, mainly in cars with active suspension. His first experience with FW16 told him that this so-called passive car was a different proposition entirely. It didn't feel good.

Williams knew they were in trouble when Senna spun during the opening race of the season in Brazil; a rare mistake made to feel even worse because it had happened in front of his adoring fans at Interlagos, a track he knew so well. There was no time for a fix as the cars were immediately shipped to Japan, where Senna's season went from bad to worse as he was tapped from behind and spun into retirement at the first corner. Senna went to the San Marino Grand Prix at Imola without a single championship point to his name; something he had









Right: There was shock and disbelief when Ayrton Senna had a fatal crash at Imola on 1 May 1994.

never experienced before in 11 seasons of Formula 1. The pressure to perform was immense, particularly as Michael Schumacher, a young upstart, had won both races.

Senna claimed pole – as he had done in Brazil and Japan – but the tension had been ramped up even further by events outside the Williams team. Rubens Barrichello had crashed heavily during Friday's practice. Senna had been one of the first to arrive at medical centre to check on the condition of his young Brazilian protégé. Barrichello got away with cuts and bruises in a spectacular accident that was seen as one of those things in motor racing. Saturday would produce a massive crash that could not be dismissed so lightly.

Attempting to qualify for only his second Grand Prix, Roland Ratzenberger slammed into a concrete wall at high speed after the nose on his Simtek-Ford had become dislodged and jammed under the front wheels. The 31-year-old Austrian died from multiple injuries. It was 12 years since a driver had lost his life during a Grand Prix meeting and eight years since Elio de Angelis had been killed while testing his Brabham at Paul Ricard.

The tension on race day was cranked up further when two cars collided seconds after the start. Debris was scattered far and wide, some of it clearing a safety fence and injuring several spectators. Today, the race would have been stopped immediately. At Imola, a safety car, a relative novelty at the time,

was dispatched. The Opel saloon was hopelessly inadequate for the job as the field completed four laps at a crawl, Schumacher weaving behind Senna's leading Williams as attempts were made to keep tyres warm and up to pressure.

At the restart, Schumacher's Benetton-Ford continued to hound Senna as they completed another lap and set off towards Tamburello, a long, fast left-hander. At 193 mph, Senna's Williams failed to negotiate the corner, ran wide and speared into the wall defining the edge of the race track and a drop to a river beyond. The right-front wheel of the Williams was torn off, a jagged piece of the broken suspension arm coming back to penetrate Senna's helmet.

The medical car, with Professor Watkins on board, was guickly at the scene. Senna, it would turn out, did not have a single broken bone in his body. But one look at the head injury told Watkins that a driver with whom he had become very close would not survive.

The death of Ayrton Senna would have a powerful effect, not least because it had been broadcast live into living rooms around the world. In one afternoon, the false sense of security was demolished instantly by the death of one of the best known names in global sport. The feeling outside the sport that motor racing had somehow become "safe" brought shock, followed by outrage.

This was a decade ahead of social media's accelerating influence and its demand for answers almost before there have been sensible and



Left: Damon Hill returns to the pits after keeping his championship hopes alive by winning the 1994 Japanese Grand Prix in difficult conditions at Suzuka.

measured questions. In May 1994, the media was about to dictate policy in a manner never experienced before by those in charge.

Questions had begun to emerge about how Senna's accident had happened, not only because this had involved a sporting icon but also thanks to there being no obvious reason for what had appeared to be a high-speed but comparatively harmless shunt from which he would have been expected to walk away. The absence of an obvious answer had exacerbated the sense of shock in the Imola paddock and it continued on to Monaco two weeks later.

The simmering unease would erupt into fullblown anxiety during Thursday's practice when Karl Wendlinger slid sideways at comparatively slow speed into the barrier at the harbour chicane. It was a seemingly innocuous accident - but the Sauber driver was knocked unconscious and then reported to be in a deep coma.

It was as if the taut elastic holding everything together had suddenly snapped. Hysteria would not be an exaggeration, best summed up by the front of L'Équipe (a sporting newspaper, no less) carrying a full page aerial photo of the accident scene under the (translated) banner headline "Stop This!" Mosley, having wisely tried to avoid a knee-jerk reaction to Imola, realised the wider implications of this development and immediately instigated a package of technical changes. Some were considered drastic, but they were being seen to be done.

SCHUMACHER V HILL

In 18 months, Damon Hill had gone from being Williams' test driver to suddenly carrying the hopes of the entire team on his shoulders. There were some, particularly within Renault's management, who did not feel the 33-year-old was up to it and pushed to have Mansell return to Williams and bring his experience to bear. The 1992 champion did make a comeback in the French Grand Prix, joined Hill on the front row of the grid but then did precious little else in the race before retiring. Hill, meanwhile, had begun to quietly assert himself.

In exactly the same way his father, Graham, had boosted the Lotus team hammered by the loss of Jim Clark by winning the next race in Spain, Damon stepped up the plate and onto the top of the podium in Barcelona. Meanwhile Schumacher, with six wins in the first seven races, appeared to be on his way to winning the title. Then it began to fall apart for the Benetton driver as he was excluded from second place in the British Grand Prix (won by Hill on an emotional day for the Englishman) and ruled out on another technicality after finishing first in Belgium. A sublime win for Hill under testing conditions in a wet Japanese Grand Prix set them up for a final confrontation on the streets of Adelaide.

The first 34 laps of the Australian Grand Prix were breathtaking. Schumacher and Hill were in a league of their own, Hill driving out of his skin to remain glued



Right: Nigel Mansell made a comeback for Williams and won the 1994 Australian Grand Prix, the race where Michael Schumacher (left) was crowned World Champion after a controversial collision with Damon Hill (right).

> to the Benetton's gearbox. Delayed momentarily by a backmarker, Hill allowed Schumacher to open a gap. It was large enough for the Benetton to be unsighted as Schumacher briefly lost control at the exit of a tight 90-degree corner, slid across the grass and touched a wall. Hill rounded the left-hander to see Schumacher rejoining the track. Thinking his rival had simply run wide briefly, but realising this might be his only chance while Schumacher was unsettled, Hill aimed for the inside as they went towards a right-hander following almost immediately. As the Williams began to draw alongside, Schumacher turned in to the corner, the contact between the two being enough to briefly launch the Benetton into the air. Both cars were damaged, Schumacher retiring on the spot.

Hill made it back to the pits, where it was discovered that a steering arm had been sufficiently bent to prevent him from continuing to score the two points he needed. Schumacher became 1994 World Champion while standing by the side of the track. Had Hill arrived at the scene of Schumacher's mistake a couple of seconds earlier, he would have seen the damage to the Benetton and waited for his moment to pass. Had he been a couple of seconds later, it would have been too late to make the door-die decision. Either way, Hill would have been World Champion.

Hill's turn would come two years later, but not before Schumacher and Benetton had given Williams a sound thrashing in 1995. In fact, Hill's most serious

rival in 1996 would turn out to be his new teammate, Jacques Villeneuve, son of Gilles. Jacques was 11 when his father was killed in 1982 but the tragedy did nothing to break a similar free spirit who loved to take calculated risks. Progress through the junior formulae took Jacques to Canada, birthplace for father and son. A step up to Indycar racing led to victory in the 1995 Indianapolis 500, Jacques being one of the few Indycar drivers to make the successful transfer to Formula 1 and become champion in both. But he almost didn't achieve the latter glory when Schumacher had yet another collision with a Williams driver in the final miles of the 1997 season. Whereas there had been room for doubt over his clash with Hill in Adelaide in 1994, this time the evidence was irrefutable. Schumacher was stripped of his championship points; a severe penalty, but one that actually made little difference to a driver for whom finishing second had been no interest in any case.

SCHUMACHER V HÄKKINEN

Schumacher had switched to Ferrari in 1996. This had been a significant part of a reshuffle within the Italian team after so many seasons without a championship. It had got so bad that Luca di Montezemolo, the man who had masterminded Ferrari's championship with Niki Lauda in 1975, was brought back to motor sport. Montezemolo, nephew of the Fiat boss Gianni Agnelli, had been



Left: Change of colours. The leading McLaren of Mika Häkkinen adopted a silver/ grey scheme while Michael Schumacher (following the Finn) had switched to the red of Ferrari. The championship contenders lead the start of the 1998 lapanese Grand Prix, the title going to Häkkinen.

made chairman of the Ferrari company in November 1991. He understood what racing was all about and did not hesitate to delegate. One early move was to install Jean Todt as team manager in 1993. It was a pragmatic decision, not because Todt had masterminded Peugeot's World Championships in rallying and sportscar racing, but because he was French. In some deeply entrenched quarters of the Ferrari establishment, this amounted to heresy.

Then Montezemolo loosened the Fiat purse strings and also talked Marlboro into contributing the £16 million annual retainer necessary to tempt Schumacher on board. When Schumacher then persuaded Ross Brawn, the technical director with whom he had won two championships at Benetton, to move from England to Italy, all the elements were in place.

Ferrari had changed. And yet, as the coming seasons would prove, in some respects it had not changed at all. The pedigree and the associated expectation remained. An initial run of failure in 1996 as the Ferraris retired more often than they finished prompted La Gazzetta dello Sport, the influential daily sports newspaper, to write: "This mythical car, which has made motor racing history, seems to have become a circus car, exploding in the hands of clowns."

Such relentless pressure added to the emotion coursing through the Ferrari garage. But at least the presence of Todt and Brawn helped keep it under

control without denying observers the curious attraction of a team that appeared to be on the verge of constant disorder without actually getting there.

This was in vivid contrast to McLaren, Ferrari's main rival in 1998. Under the continuing rigid control of Ron Dennis, the McLaren ethos was summed up by the boss's disapproval of 'this enthusiastic schoolboy reaction' in a moment of victory. Dennis went on to say: 'When you see a doctor delivering a baby, you don't see him jumping up and down. He has a professional approach to something that is an emotional moment. That's the way we want to be. The moment you stop being professional is the moment you start the downward spiral to failure.'

Such a detailed and fastidious approach was extended his cars. The red and white of Marlboro had been replaced by arguably the most immaculate and tasteful paint scheme in F1. Nevertheless, the cars were predominantly grey, as were the carefully coordinated team uniforms handled by a team that kept a clothing manager and a sewing lady in fulltime employment.

The driver line-up matched the understated team code. Mika Häkkinen, a quiet Finn, albeit with a wry sense of humour, had been part of the McLaren lineup since 1993 and knew his place. David Coulthard had come from Number 2 at Williams to be joint Number 1 at McLaren – except he would be cast as the junior driver during the first race of 1998, when he was asked to give up the lead of the Australian



Right: Mika Häkkinen (right) won the 1999 Japanese Grand Prix and his second successive World Championship. Michael Schumacher's cause was not helped when the Ferrari driver broke a leg during the British Grand Prix.

Grand Prix in favour of Häkkinen. McLaren had been afforded this tactical luxury, thanks to a car designed by Adrian Newey (who had left Williams at the end of 1996) and a Mercedes engine designed and built by Ilmor Engineering, a company very much in the mould of Cosworth Engineering from two decades before.

This may have been only Häkkinen's second victory in Formula 1 but he began to get into his stride with commanding wins in Brazil and Spain. By the time Häkkinen had pulled off a sublime win at Monaco, he was 22 points in front. Then a run of three victories for Schumacher closed the gap before the McLaren driver got going once more - only for Schumacher to fight back with a quite brilliant drive in Hungary.

Bottled up behind the two McLarens and needing to win this race to keep his championship alive, Schumacher was in trouble. Assessing the situation and knowing his driver's ability, Brawn switched from a two to a three-stop strategy. Schumacher would have a clear track – but he needed to find 25 seconds in 19 laps in order to come out ahead after the final stop. Relishing such a challenge, Schumacher drove every lap as if it was qualifying - and duly claimed a race that by rights he ought not to have won.

With two races remaining, Schumacher and Häkkinen shared the lead of the championship. In the most telling performance of the year - and just as Schumacher seemed poised to strut his stuff at

the Nürburgring – McLaren beat Ferrari at their own game through clever pit stop strategy and a drive by Häkkinen that stunned his rival. It gave the Flying Finn the psychological boost to claim his first title at the final race in Japan.

The fluctuating fight between these two teams would continue into the final season of the decade, with the additional nuance of Schumacher eliminating himself from seven races and unintentionally throwing the spotlight onto his team-mate.

STEADY EDDIE

For three years, Eddie Irvine had been Schumacher's side-kick, a task few drivers could stomach but one which Irvine managed without public complaint. In July, there was a dramatic change in job specification when Schumacher crashed out of the British Grand Prix and Irvine received instant promotion as Ferrari's only hope for the title.

Having previously seen Irvine as no threat, the mood began to change in 1999 as Irvine found he could make better use of a car that was more user friendly from his point of view. The relationship had got off to a difficult start when Irvine won the first race and Schumacher, beset with mechanical trouble, struggled home out of the points in eighth place. By the time the season had reached the halfway point at Silverstone, the Ferrari drivers were separated



Following pages: Mika Häkkinen rose to the occasion and won the World Championship with McLaren in 1998 and 1999.

Left: Eddie Irvine played an uncomplaining support role to Michael Schumacher at Ferrari and was in the running for the title in 1999.

by just six points - and this with Irvine playing his supporting role to easy perfection.

Schumacher's increasing unease was demonstrated shortly after he made a poor start at Silverstone and Irvine jumped ahead. When Irvine made a small mistake soon after, Schumacher could not regain the status quo quickly enough. Instead of waiting for Irvine to move over, as he would have done without question when asked, Schumacher lunged down the inside as they braked from 170 mph for Stowe. Irvine left his team-mate plenty of room. He also left his braking very late. At that moment, Schumacher locked his front brakes, shot across the gravel and ploughed into a tyre barrier before coming to rest against wooden sleepers. The impact and twisting motion of the chassis - the Ferrari had gone in at a slight angle – broke his right tibia and fibula.

Irvine would win in Austria and Germany (the latter courtesy of Mika Salo, Schumacher's stand-in) but otherwise Irvine was fortunate to find that the championship was backing towards him thanks to the sometimes unbelievable gaffes committed by the entire McLaren team.

At Silverstone, a rear wheel had parted company with Häkkinen's car. In Austria, Coulthard had managed to drive into his team-mate while a problem with the refuelling nozzle cost time in Germany, Häkkinen retiring eventually thanks to a tyre failure at high speed. In Belgium, both drivers came close to colliding again. Two weeks later in

Italy, Häkkinen had a quiet weep after spinning out of the lead. The pressure seemed to be getting to everyone within McLaren when a bad call at the Nürburgring sent the Finn out on the wrong tyres in a dry-wet-dry race.

Ferrari were not immune. In the same race, there was chaos during a pit stop when the Ferrari pit crew presented Irvine with three wheels when, quite reasonably, he expected four.

Schumacher drove the Ferrari again during a test and ruled out an early return, saying he was unfit. Overnight, he changed his mind. Or, had it changed for him. When Montezemolo called to see how Schumacher was getting on, the Ferrari president was told that Daddy was getting out his football boots. At that point it was quietly decided that Schumacher should justify his \$16 million retainer and come to the aid of the red party at the penultimate round in Malaysia.

Any doubts about a willingness to help Irvine were dispelled in a fine display of speed and strategy as Schumacher twice handed the lead to his team-mate and returned Irvine to the head of the championship. To no avail. Irvine would struggle in the final race in Japan, a win for Häkkinen giving the Finn backto-back titles. As the new decade beckoned, it was tempting to wonder if and when Ferrari might win their first driver's championship since Jody Scheckter in 1979. It should have been a given. But with Ferrari, you could never be certain.

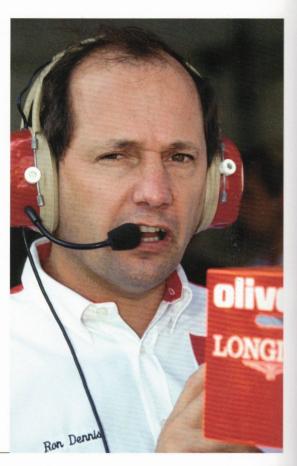




"I've always said, McLaren exists to win, and win we will." **Ron Dennis**

Right: Ron Dennis continued to mastermind the McLaren campaign throughout the decade.

Below: Suzuka, the only figure-of-eight circuit in Formula 1, frequently provided a dramatic backdrop when deciding the championship. The 1990 Japanese Grand Prix gets under way on the downhill run to the first corner.





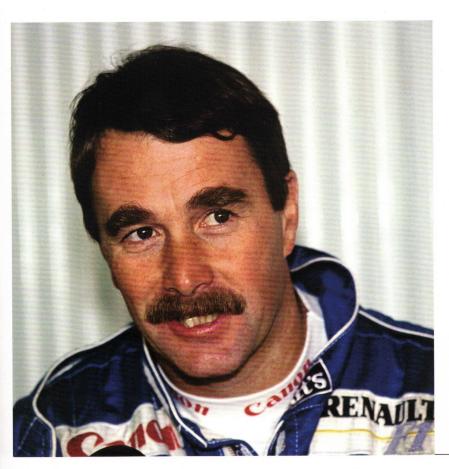




Above: Patrick Head and Adrian Newey (right) made a formidable combination when designing the Williams FW14 and FW14B.

Left: Ricciardo Patrese won four Grands Prix for Williams in the Nineties.





Opposite: Michael Schumacher laid down a marker during his first full season with Benetton in 1992.

Left: Nigel Mansell was unstoppable in 1992, winning nine Grands Prix with Williams.

Below: Jean Todt, pictured with Gerhard Berger, began to turn Ferrari around from the moment be became Team Principal in 1993.





McLaren

DURTAULDS





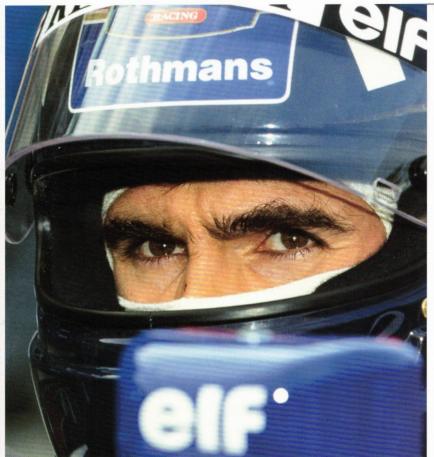
Previous pages: The unforgettable image of Ayrton Senna proudly waving the Brazilian flag on a victory lap, this time with the McLaren MP4/8 at Donington in 1993.

Above: Damon Hill, on his way to a maiden win with Williams in the 1993 Hungarian Grand Prix.

Right: Gerhard Berger won the 1994 German Grand Prix during his second stint with Ferrari.





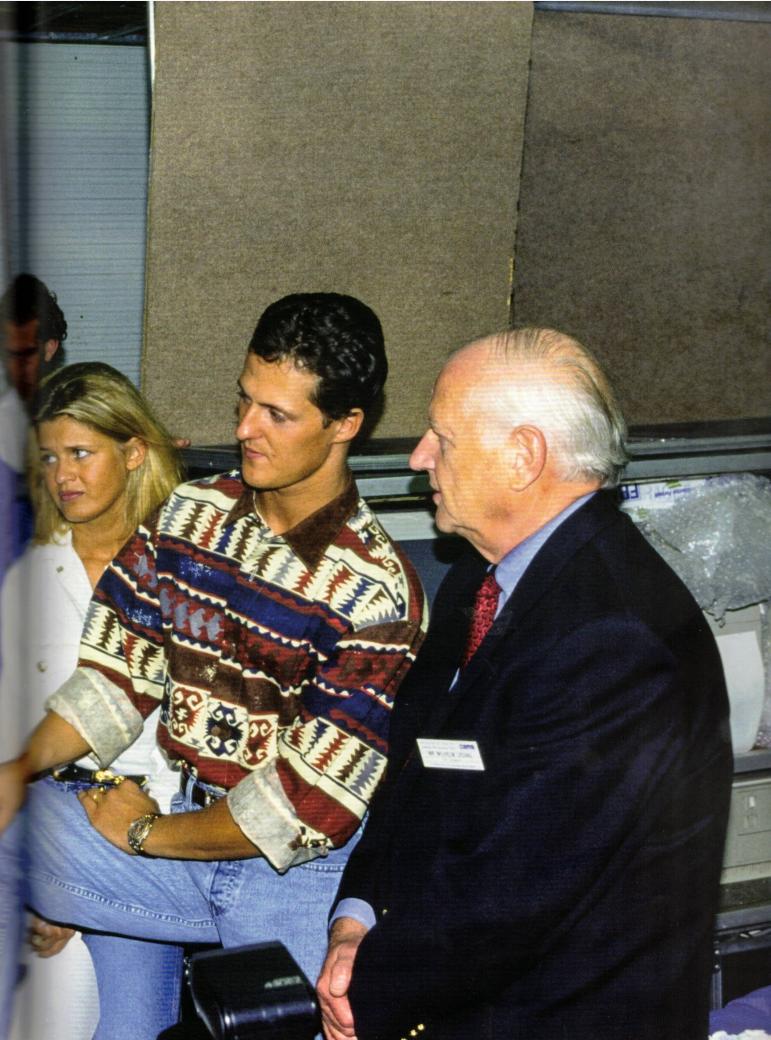


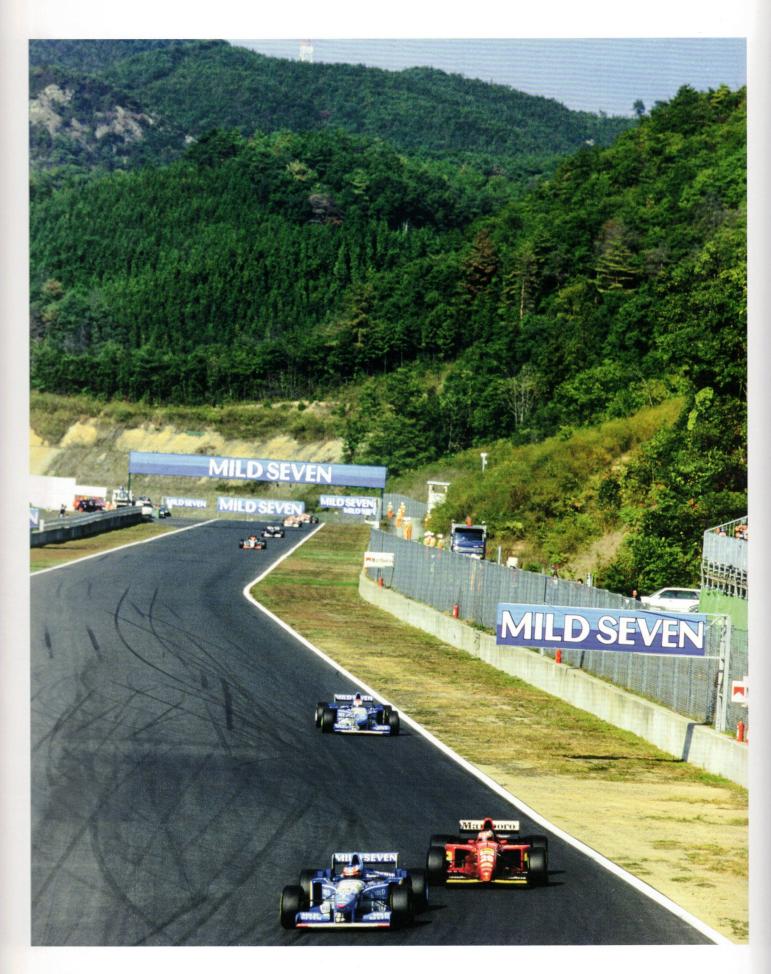
Above: A tense weekend during the San Marino Grand Prix at Imola in 1994 would reach a terrible climax on race day with the loss of Ayrton Senna.

Left: Damon Hill was thrust into the role of team leader at Williams following the death of Ayrton Senna.

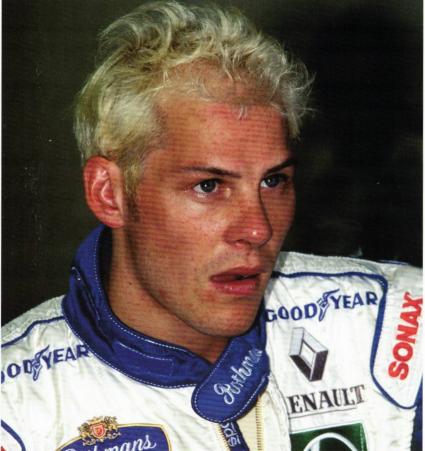
Following pages: Michael Schumacher, along with his wife Corrina, manager Willi Weber, and FIA steward Wilhelm Lyding (right), studies a replay of the collision with Damon Hill during the 1994 Australian Grand Prix.











Above: Champion Damon Hill takes the chequered flag at the end of the 1996 Japanese Grand Prix at Suzuka.

Left: Jacques Villeneuve was runner-up to his Williams team-mate, Damon Hill, in 1996 before winning the title in 1997.

Opposite: Michael Schumacher, leading the Ferrari of Gerhard Berger during the Pacific Grand Prix at Aida in Japan, won the championship for a second time with Benetton in 1995.





"Winning the championship was more than the culmination of a dream; it was the goal." **Jacques Villeneuve**

Left: Jacques Villeneuve battles with Michael Schumacher (left) for the 1997 World Championship in Jerez.

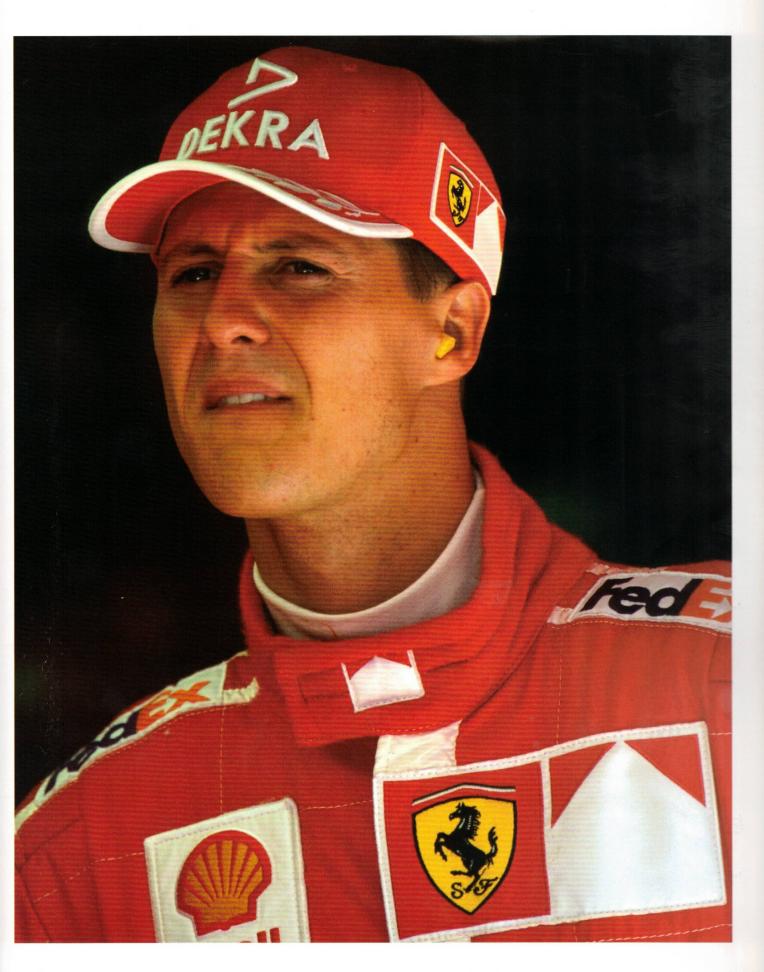
Opposite: Michael Schumacher took a gamble by leaving Benetton in 1996 and struggled initially to win the World Championship with Ferrari.

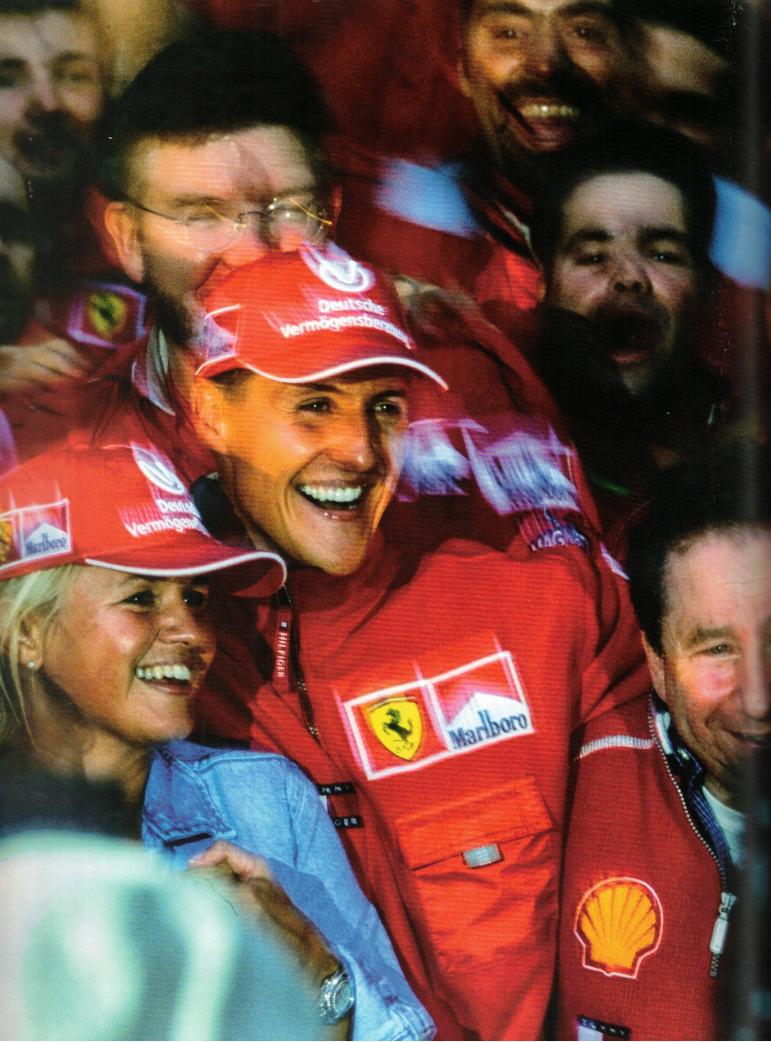
Right: Mika Häkkinen won two championships and 13 Grands Prix with McLaren in 1998 and 1999.

Below: Mika Häkkinen (McLaren #8) tangles with the Sauber of Johnny Herbert at the start of a wet Belgian Grand Prix in 1998.









OSINEXCESS

The decade began with Michael Schumacher and Ferrari winning the first race in Australia in March 2000 – a portent of what was to come. It would prove to be a devastating combination, with Schumacher claiming 56 wins and five championships. Fernando Alonso would step in to become champion in successive years with Renault before three dramatic seasons brought championships for Kimi Räikkönen, Lewis Hamilton and Jenson Button.





6. IN EXCESS

In March 2000, The Observer newspaper ran a pull-out supplement on the forthcoming Grand Prix season. Apart from Formula 1 being worthy of eight broadsheet pages, the content reflected the state of the sport as a new decade was ushered in.

The cover carried a portrait of Eddie Irvine against a backdrop of the Union Flag and a "Jaguar Challenge" headline. Inside, an examination of the arrival of the British motoring icon (albeit now owned by the Ford Motor Company) as manufacturer influence was increased further by the re-entry of BMW, this time as an engine supplier to Williams.

The wisdom of Rubens Barrichello taking Irvine's subservient place alongside Michael Schumacher at Ferrari was discussed on page 2 while, further inside, the prospects of Eddie Jordan, the man who gave Barrichello his first F1 drive, were debated after the Irishman's small team had briefly been in with a shout of winning the 1999 World Championship.

A graphic of the latest Jordan Mugen-Honda was used to illustrate a breakdown of income and expenditure. With the £1 being worth US\$1.65 at the time, it was estimated that Jordan would spend \$100m to design, build, test and race two cars in the 17 forthcoming races. Income would be derived from title sponsor Benson & Hedges (\$40m) with secondary sponsor Deutsche Post contributing \$20m. A further two or three backers would each bring \$5-10m, with a range of lesser deals being worth between \$1m and \$3m.

The article highlighted the changing face of sponsorship's role as backers no longer bought space, per se. They would invest in so-called packages that included branding on team gear, plus use of corporate hospitality at the races and during testing. In 1999, Jordan had entertained 2,000 VIPs at test sessions because of the easier access (unfettered by Bernie Ecclestone's obstructive tactics at Grands Prix) to the drivers and the team during tests run regularly throughout the season. It was estimated that it cost Jordan approximately \$2,400 each time a car completed one lap, the equivalent of \$400 per km.

A double-page poster showed the forthcoming venues, including a new addition for 2000 as the famous Indianapolis oval was adapted to incorporate a 2.6-mile road course. Otherwise, the calendar was much as before, starting in Australia and Brazil and finishing in Japan and Malaysia.

The question of who would be champion at the end of it was as difficult to predict as ever. The odds were on McLaren and Mika Häkkinen winning three in a row on the basis that Michael Schumacher and Ferrari, for all their facilities and promise, seemed destined never to win the title. And Jaguar? Observers did not share the optimistic predictions of a company that had its priorities muddled from the outset.

Jaguar had effectively bought their way into Formula 1 in June 1999 with the purchase of Stewart Grand Prix, a small, compact unit established two years earlier by Jackie Stewart and his son, Paul. The former champion's grasp of reality may have been measured by justified satisfaction with one Grand Prix win in 1999, but it was not matched by Ford's foolish false modesty in saying the company was aware it may take as much as a year or two before they became World Champions.

Previous pages: Michael Schumacher and Ferrari were unbeatable during the first five years of the new decade.

Left: Eddie Irvine leads the Jaguar attack in the 2000 Malaysian Grand Prix.



Right: Rain played havoc with the 2000 British Grand Prix. The Prost of Nick Heidfeld negotiates the tricky surface at Silverstone.

The signs were not good when Jaguar's marketing-driven management went to the trouble and expense of taking a Formula 3000 car to a quiet race track in the Midlands and running 10 different shades of green in front of cameras to establish which was the most effective on the car. Rather than apply the traditional dark colour of British Racing Green that Jaguar had proudly carried on their victorious sports cars in the Fifties, the company in its latest guise ended up with a mildly glittering metallic hue that could best be described as a Corporate Green.

Whatever the tone of paint or priority, Jaguar was nevertheless welcomed by the Formula 1 gurus as a significant manufacturer joining Ferrari, Mercedes-Benz, BMW, Honda and Peugeot on a starting grid of 22 cars. This was all very well in the short term but The Observer was not alone in asking whether this injection of serious money and influence would be a good thing further down the road when these motor companies would be at the whim of board members with eyes on balance sheets over-laid on race results.

The back page of the newspaper's supplement carried a mix of the old and the new. An interview with Tony Brooks, arguably one of Britain's most underrated drivers who had won six of the 38 Grands Prix he entered 40 years before, made a timely contrast with a profile of 20-year-old Jenson Button, about to make his Grand Prix debut with Williams. The suggestion that Button was facing a tough year would turn out to be close to an uncomfortable mark for an inexperienced youngster already being unfairly hailed by one motor sport magazine as "Britain's next World Champion".

Button would get off to an awkward start in Melbourne when he deposited his Williams against the wall in qualifying. The season was barely a day old and Button faced a racing driver's worst nightmare as he returned to the garage on foot to explain himself while his mechanics stood idly around the empty space where the car should have been. That would turn out to be Button's lowest moment as the season moved on and he gradually got his act together, scoring his first championship point two weeks later in Brazil.

It was a different story for Jaguar, which had scored no points after six races, a failure that did little to discourage further jokes following the company's curious advertising campaign in Australia. The catchphrase "The Cat's Back", laid against a leaping Jaguar was clever enough, but displaying it large on a clanking Melbourne tram had invited derision.

STUCK IN THE MUD

Such mockery was mild compared to the serious complaints awaiting Formula 1 and the British Racing Drivers' Club (BRDC), the hapless owners of



Left: David Coulthard produced a fine win for McLaren at Monaco in 2000.

Silverstone. When the 2000 Grand Prix schedule was announced the previous October, the BRDC had been alarmed to find their traditional slot moved from July to April. Bernie Ecclestone blamed an overcrowded calendar and strenuously denied that it was designed to make Silverstone toe the line.

This had come during what had been a lengthy struggle between the Northamptonshire track and Brands Hatch, which had an F1 contract from 2002. The deal with the circuit in Kent would never be fulfilled but, at the time, the interest shown by Brands Hatch gave Ecclestone leverage as Silverstone felt his demand for a £5m fee (due to double in 2002) was excessive - and dared to say as much. The date was shifted to April without consultation or notice.

Unfortunately for the BRDC and everyone else, they found their had dug their heels into a quagmire. Three weeks before the race, the rain began in earnest and scarcely stopped. The conditions in the fields acting as car parks became so bad that spectators were advised to stay away on the second day, Saturday. Those who turned up on race day, determined to receive value from their £90 admission tickets, were greeted by traffic jams that took hours to negotiate. Then, to add the final insult, the majority of the 40,000 cars had to be towed out of the car parks, some not reaching a main road until midnight.

As the Silverstone management wrung their hands in despair and wiped mud from their brogues,

Max Mosley and Ecclestone, as President and a vicepresident respectively of the FIA, did themselves no favours with responses that were, at best, evasive and, at worst, shifty. Ecclestone's dictatorial control may have done a massive amount to raise the profile of Formula 1, but the Silverstone episode suggested the sport needed to present a more legitimate and earnest response at a time when the paying public had become snared up to its back axle in the contorted politics of Formula 1. The farce made Formula 1 and the British Grand Prix, one of the country's flagship sporting events, look incompetent. F1 was plastered - in every sense - across the nation's sports pages for all the wrong reasons as critics grabbed the opportunity to rubbish the sport.

The shame for David Coulthard was that his second successive victory in his home Grand Prix had gone largely unheralded. The Scotsman may have been ahead of his team-mate, Mika Häkkinen, on the points table for the first time since 1997 but the uncomfortable truth was that both McLaren drivers were some way behind Michael Schumacher thanks to the Ferrari driver having won the first three races. Schumacher would win two more but then a run of retirements, coupled with a victory and two second places for Häkkinen, would see the Finn top the table going into the season's final quarter. Next up would be Spa-Francorchamps.

Schumacher led the Belgian Grand Prix, but Häkkinen was right with him. As they reached in



Right: It was an emotional day for Rubens Barrichello at Hockenheim in 2000 as the Ferrari driver scored his first Grand Prix win.

excess of 190 mph on an uphill climb, Häkkinen began a serious move up the inside as they headed towards the braking area for the next right-hander. A late defensive move by Schumacher saw the Ferrari's right-rear wheel touch the front wing on the McLaren. Häkkinen was outraged. Had contact being more substantial, the possible consequences at such speed did not bear thinking about. Schumacher was about to discover that such threatening tactics had not scared off his rival. Quite the reverse, in fact.

As the leaders swept up the hill once more, they closed very quickly on Ricardo Zonta, a backmarker occupying the middle of the track. Schumacher, not believing there was enough room on the right, took the long way round and went left. By a piece of aerodynamic good fortune for Häkkinen, the Ferrari moving left allowed the slipstream from the BAR to give Häkkinen a tow at just the right moment and increase the McLaren's momentum as he decided to dart to the right. The move depended entirely on Zonta holding a steady course and not swerving right when he realised Schumacher was making his move on the outside. Fully committed and flat out, Häkkinen swooped past the startled BAR driver and emerged in the lead. The fact that the track on his side of the road was damp after an earlier shower made the move even more remarkable. Schumacher was stunned; a rare occurrence.

Schumacher would regain the momentum with wins in Italy and at the debut of Indianapolis. The pressure was on Ferrari not to throw the championship away as the season moved to Japan. For the first 22 laps of Suzuka, Häkkinen was in charge and doing enough to ensure the title chase would run to the final round in Malaysia. But when McLaren brought Häkkinen in for his first pit stop earlier than planned, it opened the door for a strategic attack by Ferrari. Schumacher would need to drive the wheels off his car – which is pretty much what he did as Ross Brawn introduced a strategy that was risky but, in truth, the only option if they wanted to win this championship.

The critical moment came when Häkkinen made his final stop. As he rejoined, a sprinkling of rain made the track greasy; conditions that Häkkinen did not enjoy as much as Schumacher. The Finn lost four seconds on his out lap alone. Then Schumacher came on the radio, told Brawn he was hitting traffic and asked if this was a good point to make his final stop, albeit earlier than planned. Brawn, knowing his man had to stay out, told Schumacher to deal with it. Which he did in no uncertain style. This, aided by a pit stop 1.2 seconds faster than Häkkinen's, swung the balance. Finally, Ferrari had won the World Championship for the first time in 21 years. Italy went berserk.

If the outcome of the World Championship was a novelty for the Italian icon in 2000, it would become comparatively, if joyously, commonplace as Schumacher and Ferrari won the next four. Along

Opposite: At last! A jubilant Michael Schumacher celebrates Ferrari's first World Championship in 21 years at the end of the 2000 Japanese Grand Prix.





Right: The Ferraris, on Bridgestone tyres, stay on track while the Michelin runners withdraw to the pits at the start of the 2005 United States Grand Prix at Indianapolis.

the way, Formula 1 would play an emotional role in a healing process, the necessity for which was beyond anyone's imagining.

RIGHT AND WRONG

On 11 September 2001, four planes were hijacked. Two brought down the towers of New York City's World Trade Center; another crashed into the Pentagon at Washington, DC; and the fourth was forced down into a wooded area in Pennsylvania. The world was stunned. The United States Grand Prix at Indianapolis, 19 days later, was the largest public gathering in the shattered nation since that fateful day.

The warmth of the reception flowing from the mighty tiered grandstands left no doubt about the wisdom of running this race. With the championship having been settled several weeks before, it would have been easy for Formula 1 to back out of its commitment. On this weekend, however, the Grand Prix acted as a statement of national resolve in the aftermath of such tragedy. Four years later, the Grand Prix at Indianapolis would bring less charitable memories for thousands of American fans who felt they had been short-changed - massively.

"Hey, F1: Don't let the door hit you on the way out." The headline in the Indianapolis Star summed up the post-race feeling after Formula 1 plumbed new depths in a market place it desperately wished to cultivate.

More than 150,000 fans had turned up expecting to enjoy round nine of the 2005 FIA Formula One World Championship. What they saw was 20 cars form up on the starting grid, and then watched in disbelief as 14 of them then peeled into the pits, leaving two Ferraris, two Jordans and a pair of Minardis to go racing - if that was the correct word - for 73 laps.

Disbelief turned to dismay and then anger as plastic bottles and beer cans were thrown onto the track while the two Ferraris ran at the front and the other four drivers – all novices – squabbled over the easiest championship points they were ever likely to earn. The only common dominator was that these six cars were on Bridgestone tyres, unlike the Michelins fitted to the departed 14.

The trouble had started during the first day of practice when Ralf Schumacher slammed his Toyota backwards into the wall at the exit of a banked highspeed curve. Failure of the severely loaded left-rear tyre was thought to be the cause. On race morning, Michelin advised that it could not guarantee the safety of the left-rear tyre on this circuit.

A meeting of the teams produced compromises ranging from the installation of a chicane to slow the cars before the corner in question, to the Michelin runners not racing for championship points – but racing nonetheless. The FIA and its president would have none of it. Mosley said it was the responsibility of Michelin to provide a suitable tyre and it had failed to do so. The rules, he said, could not be



Left: The Renault of Fernando Alonso leads the field at the start of the Brazilian Grand Prix in 2005, the vear of his first World Championship.

renegotiated because one competitor had brought the wrong equipment. In any case, it would be unfair to penalise Bridgestone.

That may have been technically and legally correct. But it was nothing compared to the penalty about to be levied on the hapless race fans, totally unaware of what was happening until the much-anticipated race disintegrated before their eyes. Michelin would eventually refund spectators. By then, however, the damage had been done.

Whatever the political issues, the United States Grand Prix had remained a round of the World Championship. Schumacher's win that day should have been a golden opportunity to leap ahead of his championship rivals, In fact, it would make little difference. The feet had been cut from beneath Ferrari – and, specifically, Bridgestone – when a new rule for 2005 called for drivers to run the same tyre throughout the entire race. If Michelin messed up their specification for Indianapolis, they got it right everywhere else, the most significant beneficiary being Fernando Alonso as he scored seven wins for Renault (formerly Benetton) and became World Champion, a feat he would repeat in 2006.

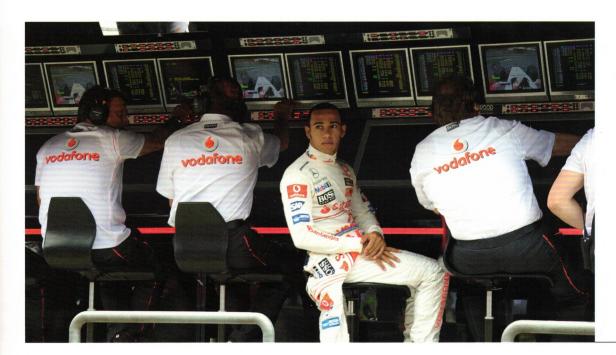
With the tyre regulations returned to the way they were, Alonso was challenged all the way that year by Schumacher, to the extent where a win in China put the Ferrari driver at the top of the championship for the first time. There were two races to run. Had Schumacher's engine not suffered a rare failure while leading in Japan, he would have been champion for an eighth time if Alonso had failed to score. But a win for the Renault driver - his first in four months after leading by 25 points – kept the title fight wide open until the final round in Brazil. Alonso needed only one point, which he achieved the hard way by finishing second rather than cruising into the top eight, which was all he needed to do given the extended distribution of points introduced in 2003.

While Alonso and Renault celebrated their double, credit was given to Schumacher who charged back to fourth place after a stop to replace a punctured tyre had dropped him to the back of the field. It was a timely performance since it seemed this would be Schumacher's last, the winner of 91 Grands Prix bowing out while at the top of his game. It also marked the end of an era within Ferrari and came just as a bright star, 16 years Schumacher's junior, was about to burst onto the scene.

HAMILTON

"MICHAEL WHO?" The headline in a Melbourne newspaper on Monday 19 March 2007 may have been tongue-in-cheek, but there was a ring of truth to it. Kimi Räikkönen had just won his first race for Ferrari with ease. The Australian Grand Prix had given the first proper indication of form and the word was that the Finn and his Ferrari were quick. That was the first of two lead stories.





Left: Lewis Hamilton was forced to sit out the latter part of the 2007 Chinese Grand Prix after getting his McLaren stuck in a gravel trap.

The second surrounded the performance of the driver who had finished third. Lewis Hamilton's debut confirmed that the McLaren driver was worth watching. This had not escaped the attention of Alonso. The reigning World Champion had moved from Renault to McLaren where, it almost went without saying, he would be the de facto Number 1 driver. Hamilton clearly had other ideas as he nipped round the outside of his team-mate at the first corner. For the much of the race, Alonso would discover the strength of the opposition, not just from Ferrari but also from within his own team.

Alonso's unease would grow as the season progressed, not helped by Hamilton winning his first Grand Prix in Canada and following it up a week later with another at Indianapolis. An increasingly chilly relationship would develop a nasty edge when Hungary hosted the 11th round of the championship.

In a business devoted to moving quickly, it seemed curious - but somehow appropriate - that the McLaren team should disintegrate because their cars were standing still during qualifying. In the 10 seconds it took Alonso to hold up Hamilton in the pit lane, McLaren's carefully managed image and modus operandi collapsed in an undignified heap.

Ron Dennis would remember the Hungarian Grand Prix for reasons other than his team's 153rd victory. Dennis had experienced his young protégé, Hamilton, kicking against the traces when he failed to follow an agreed strategy at the start of

qualifying. Alonso, as a furious act of reprisal, took the law into his own hands.

Dennis then indulged in his share of sinning at a chaotic press conference when he attempted to defend Alonso by being economic with the truth. In the space of two hours, Dennis had learned a shocking amount about the steely character of Hamilton and how this blue-eyed boy had suddenly come of age. Equally, Dennis had also been reminded of Alonso's perceived lack of respect for his status as Hamilton appeared to be allowed to do exactly what he pleased. Dennis could see the need to have his drivers co-exist, otherwise Ferrari would take advantage. Hamilton and Alonso were leading the championship but Räikkönen and Felipe Massa were not far behind.

When Alonso outperformed Hamilton in three successive races, he closed to within two points of his team-mate. Then it all went wrong for Alonso as he spun off in Japan on a day when Hamilton scored an imperious win under atrocious conditions at Fuji. Alonso's spirits plunged further in China as he flung his crash helmet at the garage wall and punched an office door off its hinges after being half a second slower than Hamilton during qualifying. This was not what he needed on a weekend when Hamilton could become the first F1 rookie to win the title.

Alonso would be quietly pleased after the race, not just because he had finished second, but also thanks to Hamilton having failed to score a

Opposite: Consistent finishes for Kimi Räikkönen allowed the Ferrari driver to steal the 2007 World Championship from McLaren.



Right: The tight and twisting Interlagos track settled a dramatic championship in 2007.

single point. It was the method of Hamilton's only retirement of the season that raised a wry smile from the Spaniard.

Hamilton had become beached in gravel while travelling at 30 mph – perhaps less. A combination of errors began when Hamilton, leading easily on a drying track, stayed on intermediate tyres through his first pit stop and hung on, hoping to reach the window for the second stop before making the change to dry-weather rubber. The team, second-guessing the weather conditions, kept Hamilton out for one lap too many. His rear tyres were shot to pieces and, as he attempted to enter the wet and slippery pit lane (compared to the dry line on the track), Hamilton slid helplessly and slowly into a gravel trap. The championship fight would run to the final race.

Seven hours after the finish in Brazil, the identity of the 2007 World Champion remained unknown. Räikkönen had left Interlagos in the belief that his sixth win of the season had been enough to win the title by a single point. But as he headed into downtown São Paulo, the race stewards were pondering a post-race report. The officials were discussing the temperature of fuel samples taken from a Williams and two BMWs that had finished fourth, fifth and sixth. This was significant because, if all three were excluded, then Hamilton would move from seventh to fourth place — and win the championship. At 10pm, the stewards decided there

was too much doubt over how the fuel samples could be measured. The results stood. Kimi Räikkönen had won the championship. Lewis Hamilton had lost it.

SPYGATE

This was the final agony in a disastrous year for McLaren, the worst in their otherwise distinguished history. Hamilton may have been in second place on the drivers' table (sharing the same points total as Alonso, but ahead because of more second-place finishes), but McLaren's name had been removed from the Constructors' Championship. This was not a clerical error. It was the result of the team being found guilty of having possession of confidential technical details belonging to Ferrari.

The story – dubbed "Spygate" – had erupted in July when a Ferrari employee was alleged to have passed information to a friend at McLaren. After much to-ing and fro-ing, the FIA eventually imposed a record fine of \$100m and the withdrawal of the team's points. A humble apology by McLaren revealed the full extent of infiltration of Ferrari information thanks to the actions of a few of their engineers acting on details leaked by a disaffected Ferrari employee. All of which was devastating for McLaren, especially Ron Dennis, who placed great store on the integrity of his team and work ethic. The start of the 2008 season could not come quickly enough.



Left: Robert Kubica escaped without injury from a massive accident with his BMW during the 2007 Canadian Grand Prix.

Unsurprisingly, and despite having another year to run on his contract, Alonso had left McLaren to rejoin Renault. His place was taken by Heikki Kovalainen, an amiable Finn, glad of the career opportunity and certain not to make waves like his predecessor. There was no guarantee, however, that the racing would be without its unexpected and occasionally emotional moments. The Canadian Grand Prix would be a case in point.

No one had expected Robert Kubica to be around in June 2008, never mind win in Montreal and lead the championship. The previous year had marked his first full season and it seemed to have ended for good when Kubica had a massive accident during the Canadian race.

He had been fighting for 12th place with Jarno Trulli when a misjudgement led to the Pole hitting the Toyota's right-rear tyre as they accelerated hard. The front wing of Kubica's car went under his leftfront wheel, lifting his white BMW into the air. It hit a concrete wall on the right, launched into a terrifying series of barrel rolls, hit the wall once more and ricocheted from one side of the track to the other, shedding wheels and bodywork as it went. It came to rest on its side, the driver showing no sign of life in the cockpit. Kubica turned out to be mildly concussed, but the violence of the accident had actually torn into the carbon-fibre tub and exposed his feet.

Survival through the colossal forces generated was a graphic acknowledgement of the validity of

the impact tests each car had to pass before being allowed to race. It was also a tribute to the continuing work of Professor Watkins and the FIA with the introduction of a protective collar around the cockpit and a so-called Hans device to which the driver's helmet is attached. Watkins said without fear of contradiction that, had the same accident happened 10 years before, the driver would have broken his neck. Not only had Kubica survived but, 12 months later, the Polish driver was standing on the top step of the podium and celebrating an emotional maiden victory. Of Hamilton and Felipe Massa, the other contenders for the championship, there was no sign.

Massa had brought his Ferrari home in a distant fifth place. Hamilton was hanging around, waiting for the outcome of a stewards' enquiry into his part in a controversial and unusual incident. Hamilton had failed to spot a red light at the end of the pit lane and slammed into the back of Räikkönen, taking them both out.

At least the shenanigans on the track had taken attention away from growing political turmoil off it. Bernie Ecclestone's path to becoming a billionaire had been smoothed in 2000 by an extraordinary 100-year-deal that allowed him to have control of the commercial rights to F1 for a comparatively paltry \$360m. This had triggered a bewildering sequence of ownership deals that, at their heart and through the seller's shrewdness, appeared to have the F1 rights attached to Ecclestone by a piece



Right: Bernie Ecclestone remained as influential as ever despite the ownership of Formula 1 changing hands.

of elastic as they bounced back, Bernie paying far less than he had originally received from original purchasers who were now out of their depth.

One deal that stuck was F1 ending up in the hands of CVC Capital Partners in 2006, with Ecclestone as chief executive. He kept the shareholders happy but, in the process, Ecclestone was beginning to lose focus on several fronts, his impotence during the Indianapolis fiasco in 2005 being a case in point.

He saw a fall from public grace by Mosley as an opportunity to work the situation to his advantage. The FIA President had been the victim of a sting as a salacious British newspaper published details of his colourful private life. Mosley would successfully sue the newspaper. In the meantime, rivals bearing a grudge grabbed the opportunity to push for Mosley's removal from office. Ecclestone - in a move he would later profoundly regret - sided with the naysayers as they met in Montreal to discuss the possibility of a breakaway series that would sidestep the governing body. Mosley, meanwhile, had received a vote of confidence from members of the FIA and was determined not to be destabilised by detractors expressing opinion about something that was, in his view, none of their business.

As ever, the racing continued regardless. Hamilton put himself back at the top of the championship with a superb win in the wet at Silverstone, followed by another in Germany. Massa, the erstwhile leader, fought back with maximum points in two races. Neither would do themselves any favours at Monza, where Sebastian Vettel, in his first full season with the small Toro Rosso team, scored a surprising and flawless victory in atrocious conditions to become the youngest Grand Prix winner. As the scene shifted to the streets of Singapore and the first F1 race to be held at night, a single point separated Hamilton and Massa.

Massa was in superb form as he won pole position with a precise and daring lap on this tricky circuit. The momentum continued into the race as he comfortably led the first 17 laps. Then an incident occurred that would have a far-reaching effect on Massa's title hopes - not to mention, certain individuals within the Renault team.

CRASHGATE

Alonso's return to Renault had hardly been stellar with only a handful of fourth places - and most of those had been down to the quality of the driver rather than his car. Singapore seemed no better as fuel-feed trouble meant 15th on the grid and the all-or-nothing tactic of running light at the start of the race, gaining places and making an early pit stop. Then, conveniently – too conveniently, as it would turn out - Alonso's team-mate, Nelson Piquet Junior (son of the triple World Champion), crashed and prompted the safety car. As the leaders seized the opportunity to make their first stops, Alonso found himself at the front, where he stayed for the rest of the evening.



Left: Brazil staged one of the most dramatic championship finales of all time in 2008 as Felipe Massa (left) and Lewis Hamilton fought it out, Massa remaining dignified in defeat.

Massa had led the stream of cars entering the pits. In the heat of the moment, as Räikkönen queued directly behind to wait his turn, Massa was given the signal to go before the fuel nozzle had been removed. Having torn the fuel hose from its roots and knocked mechanics over like skittles, Massa eventually pulled over at the pit exit, waiting for his crew to run the length of the pit lane and struggle to remove the nozzle. By the time Massa rejoined, his chances of just one point, never mind the maximum of 10, were gone. Hamilton, meanwhile, claimed six when classified third.

Despite extending his championship lead, the thought of losing it yet again was playing on Hamilton's mind at the penultimate round in Japan. A misjudgement at the first corner and a subsequent collision with Massa did nothing for either driver and ensured the fight would run to the wire in Brazil.

Hamilton led Massa by seven points and tried to forget that it could have been more had he not been controversially penalised 25 seconds and classified third instead of first in Belgium. This and other incidents throughout the year merely tightened the screw as the contenders formed on the grid, Massa on pole to the delight of the home crowd with Hamilton on the second row.

Massa did all he could by racing into the lead. Hamilton was holding fifth place - enough to give him the championship, when rain fell in the closing stages. Recalling the strategic mistake under

changing conditions in China the year before, McLaren called Hamilton in for wet weather tyres, Ferrari covering the move with Massa. Initially Hamilton struggled for grip and dropped to sixth as Vettel swept past in his Toro Rosso. Ahead was the Toyota of Timo Glock, who had taken the gamble of remaining on grooved slicks. It almost paid off.

At the start of the long climb to the finishing line on the last lap, an increase in the drizzle made the surface too slippery for the Toyota. Vettel and Hamilton had eaten into Glock's advantage and were right with the German at the final corner of the season. Massa, meanwhile, had crossed the finishing line to win at home and apparently crown a perfect afternoon by snatching the championship. But, along with a large proportion of those present, Ferrari and Massa were not aware of Glock's sudden struggle that would cause the fight to swing dramatically and finally in Hamilton's favour.

As Hamilton started his last lap, he had no idea where he was. Halfway round he had received a radio message: "You've got to pass Glock. You've got to pass Glock!" Hamilton had been focussing on getting back in front of Vettel. He didn't have the first idea where Glock was - or why he should be trying to overtake the Toyota. Such was his determination to get back in front of Vettel, Hamilton had not realised the significance of the slithering Toyota he had overtaken while vainly chasing the Toro Rosso. As he crossed the line,



Right: Brawn GP staggered the Formula 1 world in 2009 by occupying the front row of the grid for their first-ever race and going on to win it in Australia.

Hamilton had to wait a few seconds for the radio message confirming he was World Champion.

Massa was extremely dignified in defeat. It is one thing to know you've lost the championship in the closing stages of a race and quite another to actually think, for a few seconds, that you've won it. The top of the podium was the last place he wanted to be, even though the reception was rapturous and sympathetic at the same time. The Ferrari driver had done nothing wrong and it had all come down to the final kilometre of more than 5,000 raced since the season had started eight months before. Massa, more than anyone, had reason to feel aggrieved about the deleterious effect of "Crashgate" on his championship. Once he had dealt with the inevitable interviews and begun to contain his disappointment, Massa made his way to the McLaren garage and shook hands with his rival. It was a moment of genuine warmth and mutual respect. It was also a beautiful contrast to the end of 2007 and the poisonous atmosphere that had invaded Formula 1.

RISING FROM THE ASHES

As Hamilton celebrated, Jenson Button's Honda caught fire just after he had rolled to a halt in the Interlagos pit lane. It seemed the only decent thing this deeply unloved car could do. At the very moment Hamilton was rocketing to stardom, Button's career seemed to be going down the plughole. It got even

worse a few weeks later when Honda decided to pull out of Formula 1.

Ross Brawn led a last-minute buy-out of the team for which he had become principal at the beginning of 2008. But the chance of success appeared to be zero, the Brawn team failing to get a mention in the 2009 season preview carried by a leading monthly motor sport magazine. This was no surprise since the hastily formed Brawn outfit wasn't even on the back foot; it was getting up from the floor. Honda's unexpected decision to pull out of F1 had appeared to be the final nail in the coffin for a team already in dire straits. Ferrari and McLaren were being seen as favourites with BMW and Kubica threatening to take a run down the inside. Brawn - if they were lucky - would be at the back with Toro Rosso and Force India.

But Brawn knew something the opposition did not. Having immediately determined the 2008 Honda was a dog twelve months before, Brawn and his small team of underrated but smart aero engineers had begun to pick apart the new regulations proposed for 2009. According to Max Mosley, the intention of the rule change was to allow scope for innovation. There would indeed be imaginative interpretation, albeit not in the way Mosley had envisaged.

Brawn had a reputation for bending, but not breaking, technical rules when presiding over the Jaguar sports car team, Benetton and then Ferrari. Brawn had gone as far as pointing out that the proposed changes for 2009 would not reduce

downforce by the desired amount. Renault and BMW had dismissed such talk on the assumption that they knew best. It was a big mistake, and it was Brawn's aero boys who knew better

They had come up with impressive figures, mainly generated by a clever interpretation of revisions to the rear diffuser that were supposed to reduce its effectiveness and improve the ability to overtake. A lower diffuser allowed use of a gap beneath a step plane that effectively gave two diffusers - and twice the downforce. This, and clever aero detail around the front wing, took Button from potential scrapheap to possible superstar from the moment he completed the first shakedown lap.

F1, being the cynical business that it is, wrote off the consistently fast testing times as the product of the car running light in the hope of attracting sponsors to its virgin white flanks. An extraordinary one-two for Button and Rubens Barrichello in Australia proved the performance was real rather than contrived. Ferrari and others (but not Williams and Toyota, who had got hold of the same diffuser idea, albeit not as effectively) were wringing their hands.

When the subsequent and predictable whinging protest was thrown out, Brawn was on its way as Button won six of the first seven races - and then lost momentum as the opposition began to catch up. But he banished the mounting demons with a thrusting drive at Interlagos and won the championship 12 months after his world appeared to have gone up in smoke, along with his car.

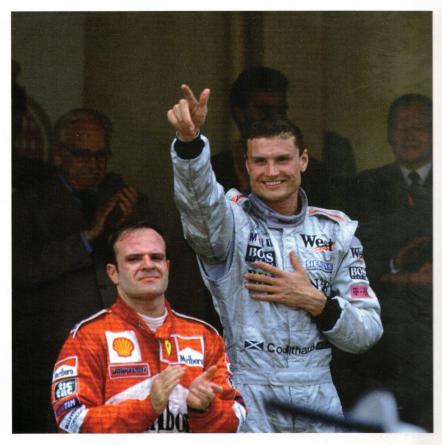
As often happens in the hectic aftermath of a championship finale, the actual winner of the race scarcely gets a mention if he is not a title contender. That was the case in Brazil 2009. But Red Bull's Mark Webber would get his fair share of the headlines, if not all the glory, as the new decade beckoned.



Right: A dream come true for Jenson Button as he won the 2009 World Championship.







"I always had confidence around street circuits. I'm proud to have won Monaco a couple of times; it's quite a nice calling card."

David Coulthard

Above: David Coulthard salutes the crowd after finishing ahead of Rubens Barrichello to win the 2000 Monaco Grand Prix.

Left: What a mess! The British Grand Prix organisers experienced great difficulties when their race was moved to April, with its adverse weather.





Above: The iconic Indianapolis Motor Speedway was adapted for Formula 1 in 2000.

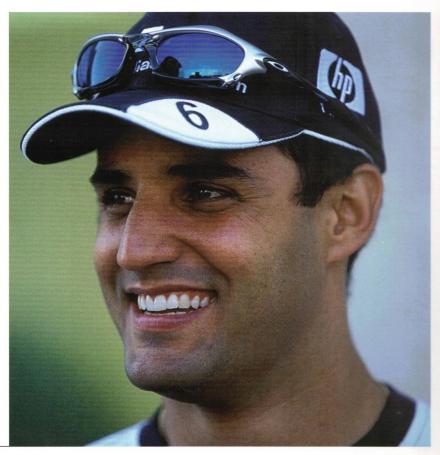
Right: Ross Brawn: technical mastermind behind Ferrari's success.

"Winning the championship is very special. To beat Michael [Schumacher] to do it brings an extra pleasure."

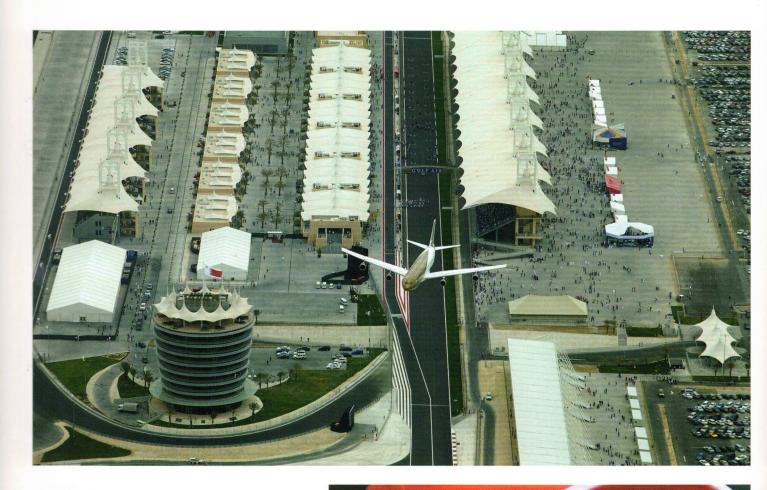
Fernando Alonso

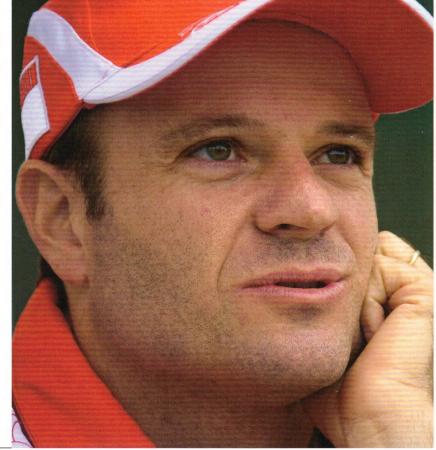
Right: Juan Pablo Montoya won seven Grands Prix when driving for Williams and McLaren.

Below: Fernando Alonso won back-to-back World Championships with Renault.









Above: Bahrain became the first Middle East country to stage a round of the World Championship on a new track at Sakhir in 2004.

Right: Rubens Barrichello won nine Grands Prix while racing for Ferrari between 2000 and 2005.





Above: Juan Pablo Montoya won the 2005 British Grand Prix for McLaren.

Left: The Renaults of Fernando Alonso and Giancarlo Fisichella lead Michael Schumacher's Ferrari during the 2005 Chinese Grand Prix, the Shanghai circuit having been added to the F1 calendar the previous year.

Following pages: A difficult time for Ron Dennis (bottom, right) and McLaren when the "Spygate" scandal erupted at the 2007 British Grand Prix. Lewis Hamilton prepares a drink while Red Bull's David Coulthard and Christian Horner look on from the back row.

Vodafone

Formula 1

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Mobile

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2007 FORMULA 1" SANTANDE

Formula 1

VESCAR

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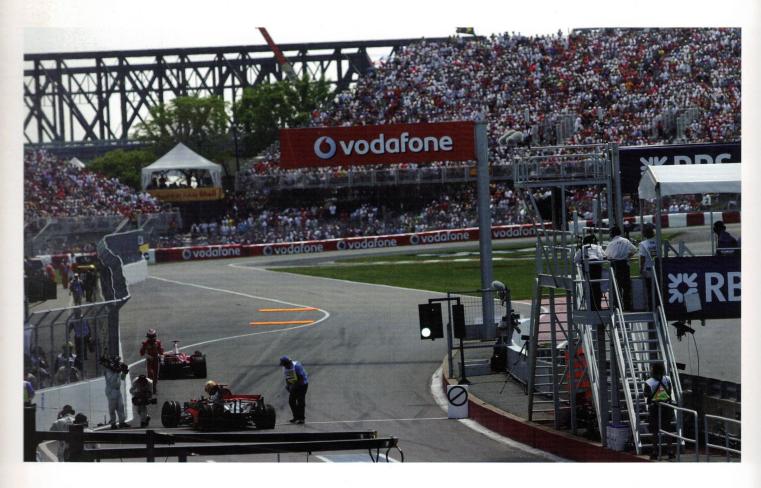


Previous pages: By splitting McLaren's race wins between them, Lewis Hamilton and Fernando Alonso helped Kimi Räikkönen (right) take the championship in 2007.

Left: Lewis Hamilton leads Fernando Alonso, which was not in the 2007 McLaren script as envisaged by the Spaniard.

Opposite: Singapore became a unique addition to the championship in 2008 by running a Grand Prix at night.

Below: Embarrassment in the Montreal pit lane after Lewis Hamilton's McLaren had hit the back of Kimi Räikkönen's Ferrari during the 2008 Canadian Grand Prix.









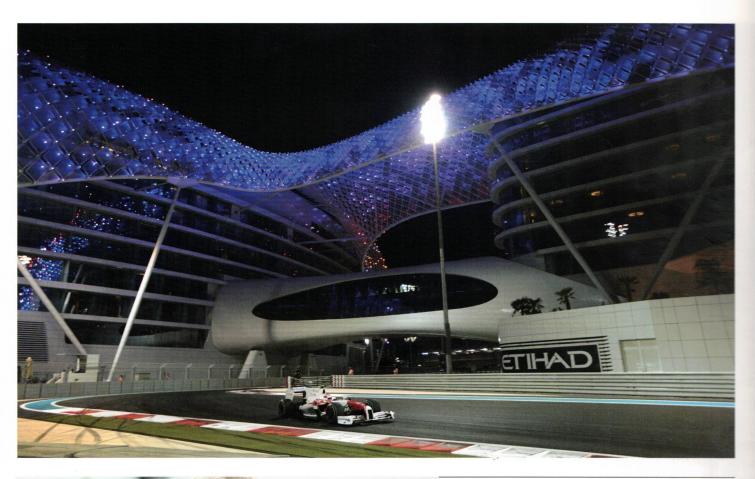




Previous pages: Lewis Hamilton and the McLaren team celebrate a dramatic championship victory in Brazil, 2008.

Above: Jenson Button won at Monaco on his way to the championship in 2009.

Left: Ross Brawn helped create an unprecedented situation by reviving the former Honda team and winning the championship in 2009.





Above: Abu Dhabi made a colourful entrance to the championship in 2009 with the track at Yas Marina.

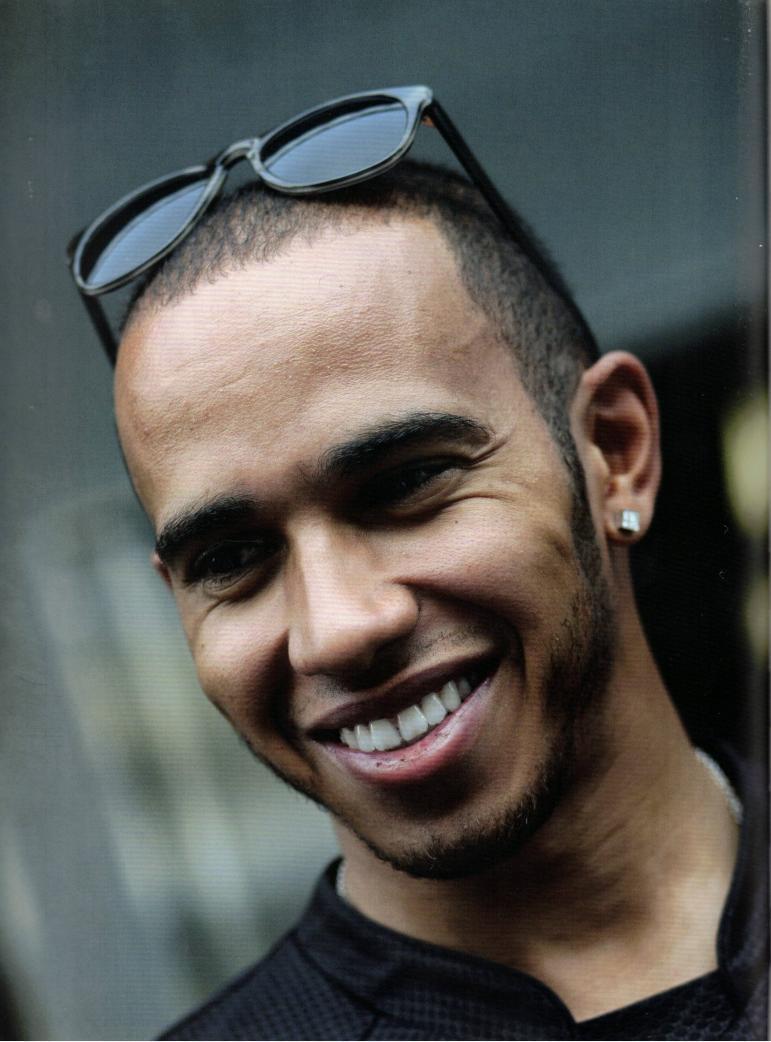
Left: Max Mosley fended off personal and professional attacks as FIA President during the decade.





"Considering where we were a year ago, the achievement of the Brawn team in 2009 is absolutely incredible." **Jenson Button**

Left: Jubilation at Brawn GP in Brazil as they celebrate the 2009 World Championship.



MOSA MOSA THE COST OF VINNING

The introduction of the turbohybrid era in 2014 gave Mercedes the opportunity to help carry Lewis Hamilton to five World Championships in the 2010s, and another to start the 2020s, with Nico Rosberg also becoming champion in 2016 before retiring. Sebastian Vettel began the decade with four world titles in succession with Red Bull, the German driver winning 13 of the 19 races in 2013.





7. THE COST OF WINNING

The landscape had changed substantially in the previous decade, due in no small part to the global financial crisis of 2007-08. Whereas the beginning of the Noughties had seen the Ford Motor Company (through Jaguar) splashing the cash as they bought the Stewart Formula 1 team, 2010 was notable for the rush to the exit as other manufacturers followed the American giant. BMW and Honda had retreated but the biggest loser, in financial terms as well as results, would be Toyota, the 2009 Abu Dhabi Grand Prix having been the last for the Japanese giant.

Estimates of Toyota's annual Formula 1 budget varied, but \$300m was thought to be close to the mark. It red-lined a poor investment that had brought just 13 podium finishes in 139 races with a best overall result of fourth in the 2005 championship. It ranked among the most money spent per championship point of any team in F1 history.

It was also a sign of huge losses at home when the Toyota Motor Corporation showed a readiness to deal with 800 redundancies at the racing team's headquarters in Cologne, as well as facing the compensation costs for breaking a commitment to stay in the sport. Toyota joined a list of more than 40 teams that had disappeared from F1 entry lists across six decades. The seventh decade, however, would bring consistency at the top, if not the bottom, of the pecking order.

In January 2008, in his capacity as President of the FIA, Max Mosley had called the F1 teams together and presciently warned of the impending financial squeeze and the need to cut expenditure. A cost cap, he pointed out, would not bring the creative handcuffs the teams feared, Mosley quoting Keith

Duckworth when the Cosworth Engineering boss had defined a proper engineer as someone who could do for £1 what any idiot could do for £100. After agreeing initially, reluctance by the teams to go further was aggravated by politics and the usual selfinterest. It led, in the summer of 2009, to plans for a breakaway series but, as had happened on previous occasions, the threat came to nothing.

Out of this, however, emerged a plan to open up the F1 entry to small teams. A £40m cost cap was the attraction that never came to fruition, but the selected newcomers (from 15 applicants) would receive technical support from the existing teams. Joining the entry list for 2010 were Lotus Racing, HRT and Virgin Racing; all three doomed at various stages in the coming months and years to



Previous pages: Lewis Hamilton emerged as a global sporting superstar, winning multiple championships across the decade.

Left: Fernando Alonso's move to Ferrari brought some outstanding drives but failed to produce a championship.

Right: Jean Todt switched from Ferrari team principal to President of the FIA.



Right: The McLaren of Lewis Hamilton slips through the take the lead of the 2010 Turkish Grand Prix after Red Bull's Sebastian Vettel and Mark Webber had collided.

the inevitable struggle with minimal budgets and resources. At the other end of the scale, Daimler AG, the parent company of Mercedes-Benz, bought a 75.1 per cent controlling stake in the 2009 champions, Brawn. This would be the first move towards a liaison that would rewrite F1 history.

Mosley, meanwhile, felt he had played his part in the story of motor sport and stood down, his position as president of the FIA being taken by Jean Todt in October 2009. The 2010 season would also herald a restructuring of the points system, with 25 for first place, 18 for second, 15 for third, then 12, 10, 8, 6, 4, 2 and 1 from fourth to tenth.

The bulk of those points in 2010 would be scored Red Bull Racing. The energy drinks company had bought Jaguar Racing in November 2004 and gradually found its feet, the most significant move being Adrian Newey's signature on a contract for 2006 and beyond. The designer's influence began to be felt in 2009, which coincided with the arrival of Sebastian Vettel to join Mark Webber, the pair scoring a one-two finish in the Chinese Grand Prix. The team's undoubted promise, however, was soon to be threatened by growing animosity between its drivers.

The previous decade had seen the introduction of Indianapolis, Bahrain, Shanghai, Istanbul, Valencia, Singapore and Abu Dhabi to the Formula 1 calendar. Of these, the Yas Marina circuit in Abu Dhabi was the most lavish and best organised, even if the track itself was an opportunity lost, given the generous

funding available. Istanbul, on the other hand, was the most imaginative of the new generation thanks to good use of elevation changes, some of which had been bulldozed into place, and a variety of corners. There was also a reasonable back straight. It was here that the Red Bull challenge would come to grief as Vettel and Webber collided during the 2010 Turkish Grand Prix.

The Red Bull drivers were tied at the top of the championship, Webber having been on a roll with two flawless wins in Spain and Monaco. With Webber taking the lead from pole in Turkey, the pressure was on Vettel to regain the initiative. On lap 40, as they ran one-two, the German saw his chance. Gaining more momentum on the back straight, Vettel moved to the extreme left of the track, where Webber had left a car's width – and no more – as they rushed towards the next corner, a left-hander. Knowing he was about to hit the braking area on the dirty side of the track, Vettel edged right - and into Webber. Both cars were damaged, Vettel's terminally. Webber rejoined with a broken front wing, made a pit stop and eventually finished third behind Lewis Hamilton and Jenson Button (who had moved from Brawn to McLaren to join Hamilton). Webber still led the championship, but it was so tight at the top that, in the space of an afternoon, Vettel had dropped to fifth behind the McLaren drivers and Fernando Alonso (now with Ferrari).

With the exception of Button, the winning continued to be shared among the main contenders



Left: Michael Schumacher's return to F1 with Mercedes proved tough. The former champion comes under pressure from the McLaren of lenson Button.

to such an extent that all four were in with a chance going into the final round in Abu Dhabi. Alonso and Webber were considered the favourites, not least because the Spaniard had scored classy wins in Italy and Singapore and taken maximum points once more when another new venue, Korea, had hosted a wet race that caught out Webber and saw Vettel's retirement with an engine failure while leading.

The perception in the Yas Marina paddock was that Vettel was not yet ready to become champion. Apart from his questionable collision in Turkey, the 23-year-old had earned a penalty for a silly mistake while leading in Hungary and then caused Button's retirement through a collision in Belgium. Webber was being seen as Red Bull's main chance when it came to preventing Alonso from becoming champion for a third time.

Ferrari clearly shared that view when they set their pit stop strategy based on Webber's tactics - and failed to react to Vettel's move to the front, where he was likely to stay given the way the various race plans were working out. The ruinous development from Alonso's point of view was an early stop by Vitaly Petrov, meaning the Russian driver was not intending to stop again - and the Ferrari was trapped behind the Renault. Under normal circumstances, it would have been the work of a moment for Alonso to scythe his way through. But this was Yas Marina, where overtaking was virtually impossible; an indictment of the track

design as much as the increasingly aero-dependent cars being unable to run in close company. Alonso and Ferrari were devastated: Vettel and Red Bull cock-a-hoop as the German became the youngest World Champion.

COMEBACKS

An added irony for Alonso was that he had found himself in such an unfavourable track position thanks to the unintentional action of a man who had brought great glory to Ferrari in the past. Three years out of the cockpit had taken their toll on Michael Schumacher in more ways than one. The need to experience the unequalled adrenalin surge of competition was one thing. But to make a comeback at the age of 41, quite another. There was an obvious PR attraction for both sides, particularly in Germany, when the seven-time World Champion was invited to join the Mercedes team in its new guise. The struggle - for both sides - would be marked by a series of performances that were far below the stellar results that had previously seemed a given for such a talented driver. In 2010, mistakes were more common than plaudits.

Going through the sixth corner of the first lap in Abu Dhabi, Schumacher had given his Mercedes a fraction too much throttle and spun. A couple of seconds later, Vitantonio Liuzzi found himself hemmed in, the Force India smashing into



Right: Kimi Räikkönen returned to F1 in 2012 and won the Abu Dhabi Grand Prix.

Schumacher's stationary car. Both drivers were unhurt but the ensuing wreckage was enough to prompt deployment of the safety car and a number of pit stops. One of them would be for Petrov's Renault, which would set the seal on Alonso's failure to take the title.

Eighteen years before, Niki Lauda had proved that not all comebacks are ill-advised. It would be the same in 2012 when Kimi Räikkönen, having taken two years out to go rallying (with little success) made what looked like a potentially unrewarding return when he signed for Lotus. Apart from using the same name, this team had no connection with the pioneering pacesetting team of the past. And yet, not only would the former champion be the only driver to finish every race in 2012, Räikkönen would take a popular victory in Abu Dhabi.

The Finn had lost none of his impassive and popular ability to ignore all political correctness by, on more than one occasion, telling his pit crew on the radio to let him get on with the driving rather than them offering advice he apparently didn't need. Räikkönen's experience would work against him in Brazil, however, when he ran wide and, thinking he knew a quick return via the pit lane for support races, found the way barred – which it hadn't been when he did the same thing in 2001.

The win at Yas Marina made Räikkönen the eighth driver (from six different teams) to stand on top of the podium in 2012. Vettel became champion for

the third year in succession but had to work hard for it, beating Alonso by just three points after 20 races (the most, thus far, in any season). Alonso had led for most of the way, which was no thanks to a car that was never a match for the Red Bull. He got there through consistency, determination and some outstanding drives, notably coming from 11th on the grid in win in Valencia.

Alonso would be runner-up again in 2013 but, this time, there would be no debate about the winner as a run of victories in the second half of the season put Vettel's fourth successive title beyond all doubt. The relentless force of Red Bull was, for bored observers, relieved by Vettel's internal conflict with Webber intensifying – and often in public.

Trouble had started as early as the second race of the season. When told to hold position behind Webber in order to help manage tyre wear and fuel consumption and secure a one-two finish in the Malaysian Grand Prix, Vettel had ignored pleas from the pit wall and pushed through to win the race. Apart from such insubordination, this was not what had been agreed before the race and accounted for a painfully awkward post-race ceremony. Vettel was embarrassed, Webber incensed, while Red Bull's management were feverishly spinning the line that it had been nothing more than a misunderstanding. At least this, and the continuing bad feeling, gave the watching world something to talk about as Vettel won 13 of the 19 races.

Opposite: Sebastian Vettel became the youngest World Champion in 2010, the first of four successive titles.

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Right: China joined the FIA Formula One World Championship in 2004. The Mercedes of Nico Rosberg and Lewis Hamilton lead the field at Shanghai in 2012.

Elsewhere in the paddock, there was continuing concern over the cost of going Grand Prix racing. It was estimated that two-thirds of the entry was struggling financially. Teams such as Marussia (formerly Virgin Racing) and Caterham (a namechange for Lotus in its new guise) were working hard to find the £50m necessary to go racing with 200 people. Red Bull, McLaren and Ferrari were hard-pressed to fund about 500 employees, plus a sophisticated technology and R&D budget that required a bottom line of £150m. In the face of these concerns, Formula 1 was about to upset the balance sheet further by adopting a change in engine formula that could only be expensive, even if addressing the growing need to be seen to be doing something about the increasing global preoccupation with energy conservation.

GOING GREEN

Formula 1 engineers, on the other hand, relished the fresh challenge. The manufacturers at Renault, Mercedes and Ferrari had been tied by frozen engine specifications. Now they had a clean sheet of paper. And a large one, at that. Turbocharged engines had dominated F1 in the past and were therefore not a new concept. But to compare the start of this latest turbo generation with the previous one in 1977 was like contrasting a contemporary Porsche 911 with a Volkswagen Beetle.

At the end of the 2013 Brazilian Grand Prix, the normally aspirated V8s of 2.4 litres, screaming at 18,000rpm, would be silenced for good. An entirely different concept would take their place. Engines would be turbocharged V6s of 1.6 litres, the underlying public purpose being the filtering of such new technology into road cars. This, according to engine designers, would put F1 back at the cutting edge.

The new power units would be limited by regulation to using a maximum fuel flow of 100kg per hour, unlike the normally-aspirated engines that had no limit on how much fuel was used. The aim was to improve efficiency and further develop an energy recovery system that had started four years before with a small so-called KERS system that only recovered kinetic energy under braking. The V6 would have a much larger Energy Recovery System (ERS) and would harvest additional power while the car was braking thanks to a motor generator unit known as MGU-K ("K" standing for "kinetic") and from the heat energy in the exhaust, through another motor generator to be known as MGU-H ("H" standing for "heat").

Apart from the attraction of F1 to major motor manufacturers, keen to use the accelerated development process that is integral to this top level of competition, companies such as Shell were deeply involved in producing even more efficient fuels (in Shell's case, for Ferrari), all of which would literally and eventually flow to the motorist through the pump.



Left: Lewis Hamilton scored the first of many wins for Mercedes in the 2013 Hungarian Grand Prix.

As if that was not enough for engine manufacturers to think about, the number of power units available to a driver in a full season would drop from eight (introduced in 2009) to five. In the event of exceeding the limit because of failures (relating to various components ranging from batteries to control electronics), grid penalties would apply. It was a tough call. The concern, meanwhile, was the confusing effect of grid penalties for no obvious reason as far as spectators were concerned and the loss of aggressive engine noise as the exhaust note became muffled by the turbo mounted in the single pipe

Looking at the wider picture, it was clear that any team manufacturing its engine and chassis in-house would be at an advantage when it came to the all-important integration between the two. The days had gone when a van from Cosworth Engineering would deliver a Ford DFV, which would then be dropped into the back of the waiting chassis, the entire ensemble ready to go racing in no time at all. At the start of 2014, Mercedes seemed to be better prepared than most, the engineers in both the chassis and engine divisions having been working on their car for more than a year in advance. The rest were beaten almost before they had started.

Enjoying this hegemony would be Nico Rosberg and Lewis Hamilton. Rosberg had been with Mercedes since 2010 but Hamilton's move had not seemed so obvious when, at the end of 2012, he took the decision to leave McLaren, the team where he had

effectively grown up. Much of this had to do with the presence of Lauda at Mercedes. The former champion had become non-executive director in September 2012. Lauda did not see this as a role to be acted out in the boardroom; typically, he would be hands-on when advising on the running of the F1 team.

Lauda immediately discovered that Mercedes were waiting for Schumacher to decide whether or not he wished to continue for a fourth season. The surprise was that the team was prepared to wait until October, by which time all of the top drivers would have signed for 2013 and there would be no decent substitute if Schumacher chose to retire.

Realising that Hamilton was not only out of contract but also, rumour had it, mildly disenchanted with McLaren, Lauda made surreptitious contact even though the two had never really met before. If Hamilton was understandably unsure, he was comforted by Lauda's assurances of Mercedes' potential when the new engine formula came into play in 2014, and influenced further when Ron Dennis allegedly flew to the Mercedes headquarters in Stuttgart and tried to discredit his driver. Hamilton duly signed.

Not long after Hamilton signed, Toto Wolff, previously an investor in the Williams team, became executive director of Mercedes F1 and soon realised he would have a challenge - welcome in many ways, but a challenge nonetheless - when it came to containing his two drivers.



Right: Valtteri Bottas finished fourth in the 2014 World Championship, his second F1 season with Williams.

The 2013 season had been a learning process all round as Mercedes sharpened up in readiness for 2014 and the new formula. The thought that Hamilton, despite his championship in 2008, was not yet fully mature would be encouraged by minor incidents that tended to devalue his undoubted speed. Hamilton and Rosberg knew each other of old and, at times, it seemed their kindergarten habits from karting had not left either of them.

Rosberg's actions during qualifying at Monaco in 2014 would mark Hamilton's card. Rosberg, who was leading the championship, appeared to make a mistake when he misjudged his braking and went into the escape road at Mirabeau. At that moment, Rosberg was on provisional pole (an important position at the best of times; vital on the tight streets of Monte Carlo). Hamilton was just starting his final lap when the yellow warning flags at Mirabeau meant he had no chance of taking the pole position many people believed he would. Rosberg denied deliberately causing the yellow flags but many had their doubts, a feeling that would grow as the season went on. Hamilton could not hide a sense of disbelief that Rosberg would employ such a tactic.

The dynamic between the former friends had changed and declined further in August when the pair made contact while battling for the lead on the opening lap of the Belgian Grand Prix. It did not affect the championship since no other driver was in the reckoning. When Hamilton stormed to victory

in Abu Dhabi, he did not need the double points awarded only in the final round (a hugely unpopular measure, never to be tried again) to ensure his championship. Hamilton had won 11 Grands Prix to Rosberg's five. The Briton had become the first driver since Schumacher in 2000 to win titles with different teams. Only Niki Lauda, Alain Prost, Nelson Piquet, Jackie Stewart, Jack Brabham and Juan Manuel Fangio – of the 32 World Champions thus far – had achieved that feat.

REALITY CHECK

On 5 October 2014, motor racing had received a terrible reality check when Jules Bianchi, a young driver in his second season, crashed and suffered a severe brain injury during the Japanese Grand Prix. Rain had affected the race from the start, drivers favouring the so-called intermediate tyre (halfway between a dry-weather slick tyre and a full wet rain tyre). But when conditions deteriorated in the closing stages, full wet tyres were the answer for drivers prepared to lose 22 seconds in the pits. Bianchi was among those choosing to stay on intermediates as he contested 17th place in his Marussia with tyres that were 18 laps old.

On the 41st lap, with 12 remaining, Adrian Sutil spun off at Dunlop Curve, a very long left-hander at the top of a hill. Bianchi was just ahead of the Sauber driver and completed the 3.6-mile lap. He



Left: The Marussia of Jules Bianchi left the road and hit a rescue vehicle during the 2014 Japanese Grand Prix, the young Frenchman succumbing to his injuries nine months later.

was quicker than his previous lap (as was race leader, Hamilton, thus proving the track conditions, if anything, were improving).

Going through Dunlop Curve, Bianchi lost control at exactly the same spot as Sutil. The crucial difference was that Sutil had spun whereas Bianchi initially caught the slide, only for the Marussia to snap into an over-correction as his tyres suddenly found grip. Instead of pirouetting across the grass run-off and into the tyre barrier, as the Sauber had done, Bianchi speared towards the rear of Sutil's accident scene at around 120 mph. He hit the leftrear wheel of a large rescue vehicle that was lifting the abandoned Sauber. The impact was so violent that it momentarily pitched the heavy recovery machine clean off the ground. Bianchi was rushed to hospital for emergency surgery.

This had come five months after the 20th anniversary of Ayrton Senna's fatal accident. A lengthy period without loss had diluted the prospect of serious injury and led the sport's newest converts to believe it was completely safe. That had been the case at Imola in 1994 and it happened again after the tragedy at Suzuka 2014 as certain sections of the audience – and media – went into catatonic shock, demanded answers and lashed out blame.

The FIA immediately commissioned a detailed report, the first of its kind under such circumstances to be carried out by an expert group of F1 personnel and drivers. With reference to Bianchi's accident.

and response to claims that a safety car should have been deployed immediately after the crash, the report said the race officials had behaved in a manner "consistent with the regulations and their interpretation following 384 accidents in the preceding eight years". In effect, the report said that, in a situation in which a car could be recovered in a short period of time (in this instance, the crashed Sauber was on the point of being removed after less than two minutes) and there was no debris on the track, double yellow flags were considered sufficient. The report stressed that double yellows were supposed to be taken seriously and that drivers ought to be in a position to stop if necessary; an intimation that Bianchi may have been going too fast under the circumstances.

The latter point actually highlighted the problem with double yellow flags insofar as any racing driver is hard-wired to go as quickly as possible and take whatever advantage is available. In F1, drivers would work mightily to tease out a tenth of a second over three miles, from one lap to the next. On seeing a yellow flag, while accepting the necessity to back off, a driver would wonder if his closest rival was of a mind to do the same. The hard-won advantage of, say, a couple of seconds could be lost in the time it took to lift his right foot from the throttle for a fraction longer than his competitor thought necessary. It was a fundamentally flawed system that had the best of intentions.



Right: Daniel Ricciardo lit up F1 with his smile and outstanding performances following a move to Red Bull in 2014.

Accepting that there was no rule covering precisely how much a driver should slow down, the governing body introduced the Virtual Safety Car, which was successfully tested at subsequent races and set the same speed electronically for each driver to match. It was introduced the following season. Bianchi, who had remained comatose since the accident, passed away on 17 July of that year.

BRIGHT NEW STARS

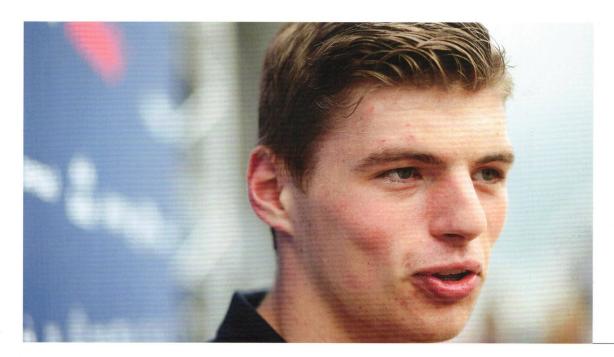
The 2014 season had seen the rise of one bright new star and the continuing fall of Ferrari. A memorable image from the first race in Melbourne had been Daniel Ricciardo beaming at all and sundry after finishing second, the Australian relishing his promotion from Toro Rosso to Red Bull as a replacement for the departed Webber. Not even a subsequent disqualification on a technicality would dull Ricciardo's inherent affability. Two months later, he was back on the podium for a brace of third places, followed by a first win in Canada and two more victories in Hungary and Belgium. His overtaking moves had been the model of precision and control, to such an extent that Ricciardo won the admiration of Alonso during an intense battle between the two in Germany.

Alonso had finished fifth that day. It would be one of his better results in a season that had started to crumble for the Ferrari driver when he staggered

home ninth in Bahrain, one place ahead of teammate Räikkönen. Team principal Stefano Domenicali was sacked and replaced by a Ferrari marketing executive from North America, Marco Mattiacci. His tenure barely lasted until the season's end, when a sponsorship specialist, Maurizio Arrivabene, was brought in to deal with the wreckage of a campaign that had seen Alonso not only fail to score a win (unlike his previous four years at Ferrari) but also make it to the lower level of the podium just twice. It was no surprise when Alonso took his leave. His choice of where to go was limited since Mercedes were accounted for and Red Bull, apart from not being overly keen on the Spaniard, were not the team they once were.

By the end of 2015, Red Bull were dusting themselves down after failing to win a race for the first time in seven years and dropping two places in the Constructors' Championship. Red Bull's relationship with Renault had taken a turn for the worse when the engine supplier did not make the promised gains after already being left breathless at the start of the new engine formula in 2014. Ricciardo was the team's bright hope, but the same could not be said for second driver, Daniil Kyvat.

The young Russian had been elevated from Toro Rosso (effectively Red Bull's nursery school) but his progress had been patchy. When Red Bull and Renault both stepped up their relative performances at the start of 2016, Kvyat seemed



Left: Max Verstappen won the 2016 Spanish Grand Prix in his first race after promotion from Toro Rosso to Red Bull.

to be doing his bit with a podium in China. At his home race two weeks later, however, Kvyat became involved in two controversial incidents with Vettel (who had taken Alonso's place at Ferrari). One of the collisions was not Kvyat's fault but the other had compromised Ricciardo's race. Within days, Kvyat had received a call from Helmut Marko, ruthless controller of the energy company's young driver programme, saying the Toro Rosso mechanics were dusting down Kvyat's old seat in readiness for a direct swap with Red Bull's latest young star.

Max Verstappen's rise had been so rapid, he had barely stopped in Formula 3 on his way to a permanent seat with Toro Rosso for the 2015 season. The Dutchman was 17 years old, kicking off a repeat of the same debate that had erupted when Räikkönen and others had made debuts at what seemed an irresponsibly young age. Each time, the doubters had been silenced. Verstappen would be no exception.

Carlos Sainz, his team-mate at Toro Rosso, may not have seen it that way when Verstappen was first choice to be elevated to the senior team in the swap with Kvyat. And what would make it even more galling – if less debatable – for Sainz, was Verstappen immediately winning his first Grand Prix on the Spaniard's home territory. The shine created by such an impressive achievement would be dulled in subsequent races as Verstappen's tactics came under fire.

The trouble began in Belgium when Verstappen had a bad start and tried to make amends by diving into a space on the inside at the first corner, but the resulting three-car collision was partly caused by Vettel not allowing Räikkönen enough room. It was argued that Verstappen should have expected trouble at a hairpin that had accounted for more carbon fibre splinters in the past than any other corner.

More controversial was Verstappen's method when defending position - particularly his habit of waiting to see which side the attacking driver was coming from and then moving at the last minute. Blocking may have been the name of the game but, in the eyes of Verstappen's critics, it became less legitimate and less of a game when the following driver had to brake at 200 mph in order to avoid an accident – as an unimpressed Räikkönen had been forced to do at Spa.

The following September, Verstappen received a gentle warning from Charlie Whiting, the FIA's respected race director. Regardless of whether or not the criticism was warranted, Verstappen's natural ability could not be ignored, as he then proved with a mesmeric climb through the field during a wet penultimate race of the season in Brazil. By then, the championship was reaching a climax, even if it was no surprise to find once more that this was exclusively the province of the Mercedes drivers.



Right: An old rivalry from junior racing was revived at Mercedes as Nico Rosberg (left) and Lewis Hamilton fought for the championship.

ROSBERG'S RESILIENCE

The difference in 2016 was that Rosberg had remained totally focussed throughout. The crucial moment had actually been when he lost the 2015 title during a miserable (for him) race as Hamilton rubbed his rival's nose in the Texas dirt at Circuit of the Americas (a new venue added in 2012) and claimed his second successive title. At that moment, Rosberg cut a forlorn figure. Critics doubted he would be able to pull himself out of the mental mire and take on his prodigiously quick team-mate for a third time. Fighting for a championship is all-consuming; two years in succession can be emotionally and physically demanding. The thought of a third must, at that moment, have prompted questions in Rosberg's mind about the value of continuing to play the roll of punch bag rather than prize-winner.

When Rosberg won the final three races of 2015 and extended the run into the first four of the following season, it gave an indication of a mind-set informed by lessons learned the hard way. That's how Rosberg dealt with an exceptionally fine run mid-season as Hamilton clawed back 43 points and Rosberg was then able to retake the lead when the Englishman subsequently suffered mechanical fragility as well as a couple of races when he was strangely off form. Rosberg had engaged overdrive with a commanding win on the unforgiving streets of Singapore, nursing his brakes and tyres and not putting a foot wrong in

humid and debilitating conditions when under attack from Ricciardo's Red Bull. Rosberg's low point had been Monaco, a dismal performance being exacerbated by Hamilton's incredibly deft touch in the wet, something he would repeat in Brazil to ensure it was all to play for in Abu Dhabi.

Hamilton had not raced hard for eight months just to make it easy for Rosberg to win the championship in the final few miles. Hamilton did all he could by taking pole and heading for the top step of the podium. But if Rosberg remained second, Hamilton's fourth championship was gone. Hamilton backed Rosberg towards the advancing Ferrari of Vettel and Verstappen's Red Bull in the hope that they might have a profound effect on the outcome. It was a perfectly legitimate tactic that cranked up the tension massively, to the point where the championship was not settled until the leaders emerged from the final corner of the season — with Rosberg successfully defending second place. He thus emulated his father Keke and won his first championship.

A few days later, Rosberg caught everyone by surprise when he announced his immediate retirement. In a business driven by rumour accelerated into inaccurate fact by social media, there had not been a single suggestion that Rosberg would make the trophy he craved most his last. The new World Champion's exhausted post-race state in the Abu Dhabi media centre had said two things. Here was an indication of the intense pressure, not just during the



final 10 laps as his life's work had come under a threat he could do little about, but of a mental battle that had actually begun with recovery from the crushing defeat by Hamilton in 2015. Hamilton may have won 10 races to Rosberg's nine in 2016, but the German had scored more points. Nothing could take that away from him.

Rosberg had every sympathy when his replacement, Valtteri Bottas, raised his game over the next three seasons and yet, despite such a supreme effort, faced the frustration created by a team-mate who consistently found that extra tenth of a second when it was needed most. When Hamilton won his sixth title in 2019, and increasingly conducted himself in the relaxed manner of a man completely at ease in his own skin, there were few criticisms available. There was no denying that the Mercedes remained the best car - but only just in 2019. Hamilton made good use of it and his team made fewer mistakes than anyone else. No matter what was thrown at Mercedes, they could cope.

HALO

In 2018, the sport in general had learned to cope with a substantial change to the traditional appearance of a Formula 1 car. With cars being stronger and safer, it had become obvious that the driver's head remained vulnerable. A cockpit framework, known as a halo, had become part of every Formula 1 car, like it or not. And the vast majority of race fans didn't like it.

The halo's appearance had been the major fuel igniting hostile comment across media platforms. Apart from its looks, the introduction of the halo had also been criticised for interfering with the F1 open cockpit DNA. Critics said this was no longer Grand Prix racing as the sport's followers knew and loved it. The reality was that such well-intentioned and forceful objections were a waste of time. The FIA had got itself between a rock and a very hard place from the moment it was announced that action needed to be taken to increase head protection. Had nothing been done, the bottom line was that in the event of further serious head injury, motor racing would be torn to pieces for failing to act on an area previously identified as having a safety shortcoming.

Head protection had appeared on the agenda in 2009 when Henry Surtees, son of former world champion John, was killed by a loose wheel in a Formula 2 race. Just over a week later, Felipe Massa received life-threatening injuries when struck on the head by a loose spring during qualifying for the Hungarian Grand Prix. In the aftermath of Bianchi's fatal accident, the subject was raised again even though the subsequent investigation found that cockpit protection would have made no difference to the Marussia driver's injuries. In 2015, former Formula 1 driver Justin Wilson was killed by debris from another car during an Indycar race and prompted the Grand Prix Drivers' Association to call for extra protection. This followed four years after the British driver and Indy

Above: Toro Rosso acted as a junior team to Red Bull, giving young drivers the opportunity to shine. Pierre Gasly leads Brendon Hartley in China in 2018.

500 winner Dan Wheldon had died of head injuries sustained when his airborne Indycar hit a fence post.

All of this accelerated research that had been started by the FIA and prompted a deadline for the 2017 F1 season. Amid concerns that the halo was being rushed through without proper testing at various circuits (checking, for example, visibility affected on severe elevation changes such as Eau Rouge at Spa-Francorchamps), it was agreed to postpone introduction until 2018.

As work with the halo continued, a wrap-round windscreen (known as the Shield) made its first appearance on Vettel's Ferrari during practice for the British Grand Prix. When the championship leader reported distorted vision and a feeling of giddiness — and with a design deadline for 2018 cars looming — the shield was shelved, leaving the halo as the only viable option. F1 ingenuity being what it is, the halo was gradually refined and scarcely warranted an adverse comment as the decade reached its end. In any case, there were other important issues to be addressed.

NEW MANAGEMENT; UNPRECEDENTED CRISIS

In the early races of the 2017 season, commentators noted a refreshing breeze blowing through the F1 paddock. People, they said, were smiling more; there was less hassle and none of the nit-picking rules apparently conceived for no other reason than to make life unnecessarily difficult. In January 2017, CVC Capital Partners had sold Formula 1 to Liberty Media, with the American organisation (part of 21st Century Fox) breathing new life into every aspect of the sport.

At Barcelona in 2017, Liberty Media began work on a Fan Zone, appreciating the needs and interests of the people whose hard-earned cash was helping oil the commercial wheels. The extensive area behind the main grandstand became a buzzing, well-organised focal point, with live music and dancing. Innovations included pit-stop challenges, racing simulators and photo opportunities waving a chequered flag or attempting victory leaps on a podium. There were wandering minstrels and cartoonists working on the walls. The place seemed to bustle with life rather than simply being a market stall for t-shirts piled high in price and low in imagination. Up above, a zip-wire ran from one end of this colourful scene to the other.

There may have been room for improvement but, as a tentative start, it was showing all the signs of F1 wanting to engage more with the fans. The experience also embraced a fully functioning garage in the pit lane, showing how F1 cars are prepared and how a team works at the race track. A two-seater F1 car was made available for the first time to take the lucky winner of a golden ticket for a lap of the track. In another first, the three fastest drivers in qualifying were interviewed on the grid immediately after the session had ended.

At that stage of the F1 image revamp, no one could possibly have predicted the shocking events that would completely destabilise the world in 2020. The first hint of the advancing Covid-19-fuelled chaos came when the opening race in Australia had to be cancelled at the 11th hour. Never mind the subsequent loss of live sport for race fans, the abrupt cessation of revenue was potentially catastrophic for everyone involved in F1.

Between them, Liberty Media and the FIA pulled off a minor miracle by somehow moving 2,500 personnel to 17 Grands Prix spread across 12 countries in 24 weeks. As an example of the extensive, essential – and expensive – protection and prevention operation, a total of 7,723 Covid-19 tests were carried out on personnel between 4 and 16 December, during which time the final two races were held in Bahrain and Abu Dhabi.

The calendar may have been telescoped into a hectic schedule, and the restrictions on long-haul travel may have forced a largely Eurocentric campaign, but the resulting season ensured sponsorship contracts and media rights could be fulfilled. With only three of the Grands Prix allowing a small number of spectators, race fans watched on a variety of platforms and gave F1 its strongest ever year in digital media.

The viewers enjoyed what they saw, particularly when circumstances forced the introduction of Mugello and Portimao, two worthwhile venues suddenly presented with hosting opportunities they might not otherwise have had. Despite Lewis Hamilton establishing a record 95 career F1 victories and easily matching Michael Schumacher's seven World Championships, the racing remained entertaining and frequently spectacular. There were two first-time winners (Pierre Gasly and Sergio Perez) on track while, in the virtual world, interest in F1 esports exploded. More than 30 million fans watched as 287,000 gamers attempted to qualify for Virtual Grands Prix that

Opposite: Lewis Hamilton, hailed by his home crowd after winning at Silverstone in 2019. included the participation of drivers such as Charles Leclerc, Lando Norris and George Russell.

Back on the real-world track, Romain Grosjean survived one of the most severe accidents in decades in a desperately dramatic incident. On the opening lap of the Bahrain Grand Prix, the Frenchman's Haas smashed through the crash barrier, split in two and burst into flames. Grosjean walked away, minus a shoe, with burns to his hands. Apart from shock, he was thankfully otherwise unaffected.

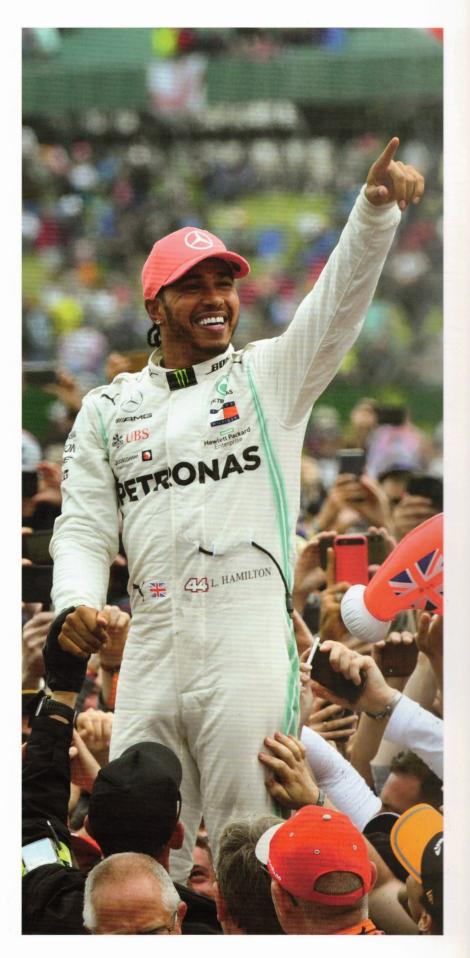
Grosjean's survival was a tribute to the constant search for improved driver protection, even though the accident itself underlined the stark truism that motor racing can never be completely safe. A colossal impact had seen the barriers swallow the front of the car, but the halo above Grosjean's head had forced the metal apart and, in the process, saved his life. There would be no further dispute about the efficacy of this device.

A less spectacular – but nevertheless potentially hazardous - moment during the British Grand Prix had seen a tyre failure almost cost Hamilton one of his 11 victories in 2020. The eventual win may have been in front of empty grandstands, but it was no less important for that, if only because Silverstone had helped provide a championship structure despite having to completely revise its business model and financial arrangement with F1.

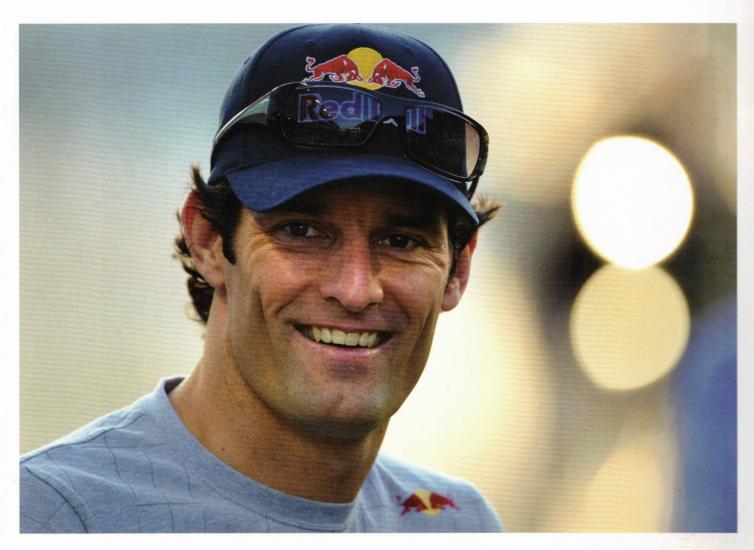
The pandemic had forced the home of British motor racing, in common with sporting venues worldwide, to close its doors and, in the process, cut off revenue just as it should have been coming on stream for the summer. Heeding the urgent need that F1 had to have somewhere to perform, Silverstone had come to a pragmatic arrangement that suited both sides and provided the best solution under the circumstances.

Much of this was with the help of Ross Brawn, Managing Director – Motorsport at F1, who had joined after a brief hiatus following years on the other side of the fence. Never in all his vast experience, however, had the Englishman come across a season such as this.

Brawn's F1 working life with several teams had allowed him to witness Silverstone in its various guises, the latest (introduced in 2010) incorporating a new infield loop and pit complex. The landscape may have changed beyond recognition since that first Grand Prix in 1950, but this classic race track had retained its challenge and attraction just as surely as the sport itself across 70 extraordinary years.





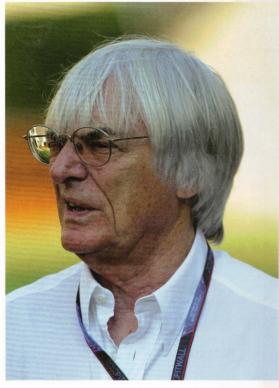


Above: Mark Webber won four Grands Prix while challenging for the championship in 2010.

Right: Bernie Ecclestone continued to play a leading role until Formula 1 changed hands later in the decade.

Left: Michael Schumacher powers his Mercedes through the rain during practice for the 2010 Belgian Grand Prix. The former champion received a grid penalty for an incident during the previous race in Hungary but finished in the points at Spa-Francorchamps.

Following pages: Jenson Button prepares to leave the pits in Montreal following a tyre change during an eventful 2011 Canadian Grand Prix, which the McLaren driver won on the last lap.









Above: India joined the Grand Prix calendar in 2011. The Ferraris of Fernando Alonso and Felipe Massa chase the leading Red Bulls on the opening lap at Buddh International Circuit.

Right: Nico Rosberg scored his first pole position and Grand Prix victory for Mercedes in China in 2012.

Opposite: Lewis Hamilton won at Circuit of the Americas when the Texan venue hosted the United States Grand Prix for the first time in 2012.









Above: Lewis Hamilton leads from pole position and heads for his first win with Mercedes at the Hungaroring in 2013. He is followed by his team-mate, Nico Rosberg (left) with the Red Bull of Sebastian Vettel holding off Romain Grosjean's Lotus on the outside.

Left: Christian Horner was Team Principal during Red Bull's four successive championships at the beginning of the decade.

Opposite: Sochi staged the first Russia Grand Prix, using the same site as the Winter Olympics in 2014.





Opposite: The 2016 championship was a close fight between Nico Rosberg (#6) and Lewis Hamilton (#44). The Mercedes pair dispute the first corner of the Canadian Grand Prix at Montreal.

Left: Max Verstappen scored a sensational maiden Grand Prix victory in Spain during his first race for Red Bull in 2016.

Below left: An exhausted but jubilant Nico Rosberg won the championship in Abu Dhabi in 2016 and announced his retirement days later.

Below: Charlie Whiting, a popular and key figure as Race Director and Official Starter.











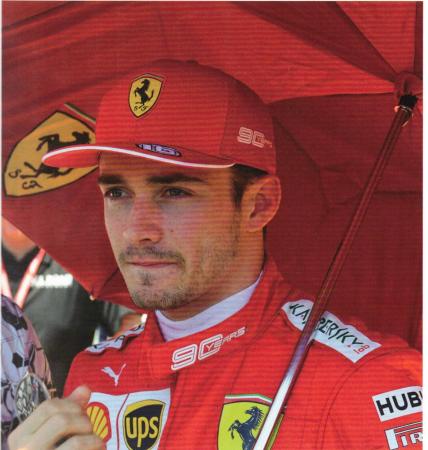
Above: Carlos Sainz (Renault) and Charles Leclerc (Sauber); two up-and-coming stars in 2018.

Opposite: After switching to Ferrari in 2015, Sebastian Vettel was twice runner-up to Lewis Hamilton in the championship.

Right: Red Bull's Max Verstappen established himself as a future championship contender in the final part of the decade.







Above: Lewis Hamilton takes part in an autograph session as Formula 1 makes itself more accessible to race fans.

Left: A move to Ferrari propelled Charles Leclerc into the limelight in 2019.

Opposite: Pierre Gasly was a first-time winner during the rearranged 2020 season, the Frenchman taking victory for AlphaTauri in the Italian Grand Prix at Monza.







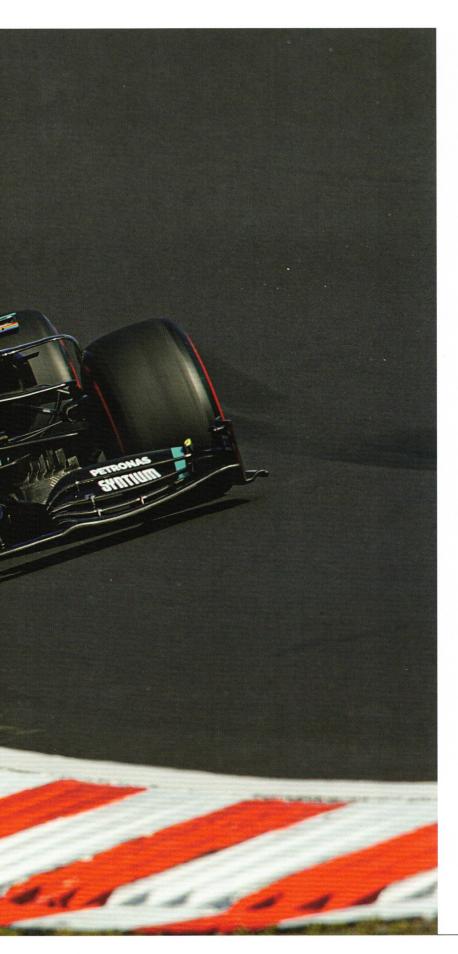


Above: Romain Grosjean makes his remarkable escape from a blazing Haas that had gone through the crash barrier during the first lap of the 2020 Bahrain Grand Prix.

Opposite: Mugello staged a World Championship Grand Prix for the first time as Formula 1 looked for suitable venues during the pandemic-stricken 2020 season. The Tuscan Grand Prix was one of the few to allow a strictly limited number of spectators.

Left: Sergio Perez stands atop his Racing Point and savours his first F1 victory at the end of the 2020 Sakhir Grand Prix in Bahrain.





Left: Mercedes painted their car black in recognition of Lewis Hamilton's campaign for diversity and equality. The Englishman went on to dominate the 2020 season and match Michael Schumacher's record of seven World Championships.

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DRIVERS' WORLD CHAMPIONSHIP CONSTRUCTORS' CUP							
YEAR	DRIVER	NAT.	CONSTRUCTOR	PTS	CONSTRUCTOR	PTS	
1950	Giuseppe Farina	ITA	Alfa Romeo	30		*	
	Best four scores to d	ount					
1951	Juan Manuel Fangio	ARG	Alfa Romeo	31		*	
	Best four scores to c	ount					
1952	Alberto Ascari	ITA	Ferrari	36	*	*	
	Best four scores to c	ount					
1953	Alberto Ascari	ITA	Ferrari	34.5	*	*	
	Best four scores to c	ount					
1954	Juan Manuel Fangio	ARG	Maserati &	40	*	*	
	Best five scores to co	ount	Mercedes				
1955	Juan Manuel Fangio	ARG	Mercedes	40	*	*	
	Best five scores to c	ount					
1956	Juan Manuel Fangio	ARG	Ferrari	30	*	*	
	Best five scores to c	ount					
1957	Juan Manuel Fangio	ARG	Maserati	40	*	*	
	Best five scores to c	ount					
1958	Mike Hawthorn	GBR	Ferrari	42	Vanwall	48	
	Best six scores to co	unt					
1959	Jack Brabham	AUS	Cooper	31	Cooper-Climax	40	
	Best five scores to c	ount					

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YEAR DRIVER NAT. CONSTRUCTOR PTS CONSTRUCTOR 1970 Jochen Rindt AUT Lotus-Ford 45 Lotus-Ford Best 11 scores from 13 races to count 1971 Jackie Stewart GBR Tyrrell-Ford 62 Tyrrell-Ford Best nine scores from 11 races to count 1972 Emerson Fittipaldi BRA Lotus-Ford 61 Lotus-Ford Best 10 scores from 12 races to count	UP
Best 11 scores from 13 races to count 1971 Jackie Stewart GBR Tyrrell-Ford 62 Tyrrell-Ford Best nine scores from 11 races to count 1972 Emerson Fittipaldi BRA Lotus-Ford 61 Lotus-Ford	PTS
1971 Jackie Stewart GBR Tyrrell-Ford 62 Tyrrell-Ford Best nine scores from 11 races to count 1972 Emerson Fittipaldi BRA Lotus-Ford 61 Lotus-Ford	59
Best nine scores from 11 races to count 1972 Emerson Fittipaldi BRA Lotus-Ford 61 Lotus-Ford	
1972 Emerson Fittipaldi BRA Lotus-Ford 61 Lotus-Ford	73
Total Line South Repairs of the South State Stat	
Best 10 scores from 12 races to count	61
1973 Jackie Stewart GBR Tyrrell-Ford 71 Lotus-Ford	92
Best 13 scores from 15 races to count	
1974 Emerson Fittipaldi BRA McLaren-Ford 55 McLaren-Ford	73
Best 13 scores from 15 races to count	
1975 Niki Lauda AUT Ferrari 64.5 Ferrari 7	2.5
Best 12 scores from 14 races to count	
1976 James Hunt GBR McLaren-Ford 69 Ferrari	83
Best 14 scores from 16 races to count	
1977 Niki Lauda AUT Ferrari 72 Ferrari	95
Best 15 scores from 17 races to count	
1978 Mario Andretti USA Lotus-Ford 64 Lotus-Ford	86
Best 14 scores from 16 races to count	
1979 Jody Scheckter RSA Ferrari 51 Ferrari	113
Best eight scores from 15 races to count	

196	U S					
DRIVE	RS' WORLD CHAMP	IONS	HIP		CONSTRUCTORS'	CUP
YEAR	DRIVER	NAT.	CONSTRUCTOR	PTS	CONSTRUCTOR	PTS
1960	Jack Brabham	AUS	Cooper-Climax	43	Cooper-Climax	48
	Best six scores from	10 ra	ces to count			
1961	Phil Hill	USA	Ferrari	34	Ferrari	40
	Best five scores from	n 8 rac	tes to count			
1962	Graham Hill	GBR	BRM	42	BRM	42
	Best five scores from	n 9 rac	tes to count			
1963	Jim Clark	GBR	Lotus-Climax	54	Lotus-Climax	54
	Best six scores from	10 ra	ces to count			
1964	John Surtees	GBR	Ferrari	40	Ferrari	45
	Best six scores from	10 ra	ces to count			
1965	Jim Clark	GBR	Lotus-Climax	54	Lotus-Climax	54
	Best six scores from	10 ra	ces to count			
1966	Jack Brabham	AUS	Brabham-Repco	42	Brabham-Repco	42
	Best five scores from	n nine	races to count			
1967	Denny Hulme	NZL	Brabham-Repco	51	Brabham-Repco	63
	Best nine scores from	m 11 i	races to count			
1968	Graham Hill	GBR	Lotus-Ford	48	Lotus-Ford	62
	Best 10 scores from	12 rd	ices to count			
1969	Jackie Stewart	GBR	Matra-Ford	63	Matra-Ford	66
	Best nine scores from	m 11	races to count			

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130	50 5					
DRIVE	RS' WORLD CHAMP	IONS	HIP		CONSTRUCTORS	CUP
YEAR	DRIVER	NAT.	CONSTRUCTOR	PTS	CONSTRUCTOR	PTS
1980	Alan Jones	AUS	Williams-Ford	67	Williams-Ford	120
	Best 10 scores from	14 ra	ces to count			
1981	Nelson Piquet	BRA	Brabham-Ford	50	Williams-Ford	95
	Best 11 scores from	15 ra	ices to count			
1982	Keke Rosberg	FIN	Williams-Ford	44	Ferrari	74
	Best 11 scores from	16 ra	ices to count			
1983	Nelson Piquet	BRA	Brabham-BMW	59	Ferrari	89
	Best 11 scores from	15 ra	ices to count			
1984	Niki Lauda	AUT	McLaren-Porsche	72	McLaren-	143.5
	Best 11 scores from	16 rd	aces to count		Porsche	
1985	Alain Prost	FRA	McLaren-Porsche	273	McLaren-Porsch	e 90
	Best 11 scores from	16 rd	aces to count			
1986	Alain Prost	FRA	McLaren-Porsche	72	Williams-Honda	141
	Best 11 scores from	16 rd	aces to count			
1987	Nelson Piquet	BRA	Williams-Honda	73	Williams-Honda	137
	Best 11 scores from	16 rc	aces to count			
1988	Ayrton Senna	BRA	McLaren-Honda	90	McLaren-Honda	199
	Best 11 scores from	16 re	aces to count			
1989	Alain Prost	FRA	McLaren-Honda	76	McLaren-Honda	141
	Best 11 scores from	16 rd	aces to count			
0.5						

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DRIVE	RS' WORLD CHAMP	CONSTRUCTORS'	CUP			
YEAR	DRIVER	NAT.	CONSTRUCTOR	PTS	CONSTRUCTOR	PTS
1990	Ayrton Senna	BRA	McLaren-Honda	78	McLaren-Honda	121
	Best 11 scores from	16 ra	ces to count			
1991	Ayrton Senna	BRA	McLaren-Honda	96	McLaren-Honda	139
	All scores counted					
1992	Nigel Mansell	GBR	Williams-Renault	108	Williams-Renault	164
	All scores counted					
1993	Alain Prost	FRA	Williams-Renault	99	Williams-Renault	168
	All scores counted					
1994	Michael Schumacher	GER	Benetton-Ford	92	Williams-Renault	118
	All scores counted					
1995	Michael Schumacher	GER	Benetton-Renault	102	Benetton-Renault	137
	All scores counted					
1996	Damon Hill	GBR	Williams-Renault	97	Williams-Renault	175
	All scores counted					
1997	Jacques Villeneuve	CDN	Williams-Renault	81	Williams-Renault	123
	All scores counted					
1998	Mika Häkkinen	FIN	McLaren-	100	McLaren-	156
	All scores counted		Mercedes		Mercedes	
1999	Mika Häkkinen	FIN	McLaren-	76	Ferrari	128
	All scores counted		Mercedes			

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DRIVERS' WORLD CHAMPIONSHIP					CONSTRUCTORS'	CUP
YEAR	DRIVER	NAT.	CONSTRUCTOR	PTS	CONSTRUCTOR	PTS
2010	Sebastian Vettel	GER	Red Bull-Renault	256	Red Bull-Renault	498
	All scores counted					
2011	Sebastian Vettel	GER	Red Bull-Renault	392	Red Bull-McLaren	650
	All scores counted					
2012	Sebastian Vettel	GER	Red Bull-Renault	281	Red Bull-Renault	460
10/50	All scores counted					
2013	Sebastian Vettel	GER	Red Bull-Renault	397	Red Bull-Renault	596
	All scores counted					
2014	Lewis Hamilton	GBR	Mercedes	384	Mercedes	701
	All scores counted					
2015	Lewis Hamilton	GBR	Mercedes	381	Mercedes	703
	All scores counted					
2016	Nico Rosberg	GER	Mercedes	385	Mercedes	765
	All scores counted					
2017	Lewis Hamilton	GBR	Mercedes	363	Mercedes	668
	All scores counted					
2018	Lewis Hamilton	GBR	Mercedes	408	Mercedes	655
	All scores counted					
2019	Lewis Hamilton	GBR	Mercedes	413	Mercedes	739
	All scores counted					

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DRIVE	DRIVERS' WORLD CHAMPIONSHIP CONSTRUCTORS' CUP						
YEAR	DRIVER	NAT.	CONSTRUCTOR	PTS	CONSTRUCTOR	PTS	
2000	Michael Schumacher	GER	Ferrari	108	Ferrari	170	
	All scores counted						
2001	Michael Schumacher	GER	Ferrari	123	Ferrari	179	
	All scores counted						
2002	Michael Schumacher	GER	Ferrari	144	Ferrari	221	
	All scores counted						
2003	Michael Schumacher	GER	Ferrari	93	Ferrari	158	
	All scores counted						
2004	Michael Schumacher	GER	Ferrari	148	Ferrari	262	
	All scores counted						
2005	Fernando Alonso	ESP	Renault	133	Renault	191	
	All scores counted						
2006	Fernando Alonso	ESP	Renault	134	Renault	206	
	All scores counted						
2007	Kimi Räikkönen	FIN	Ferrari	110	Ferrari	204	
	All scores counted						
2008	Lewis Hamilton	GBR	McLaren-	98	Ferrari	172	
	All scores counted		Mercedes				
2009	Jenson Button	GBR	Brawn-Mercede	s 95	Brawn-Mercedes	172	
	All scores counted						

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DRIVE	DRIVERS' WORLD CHAMPIONSHIP					RS' CUP
YEAR	DRIVER	NAT.	CONSTRUCTOR	PTS	CONSTRUCTOR	PTS
2020	Lewis Hamilton	GBR	Mercedes	347	Mercedes	573
	All scores counted					
4.52						

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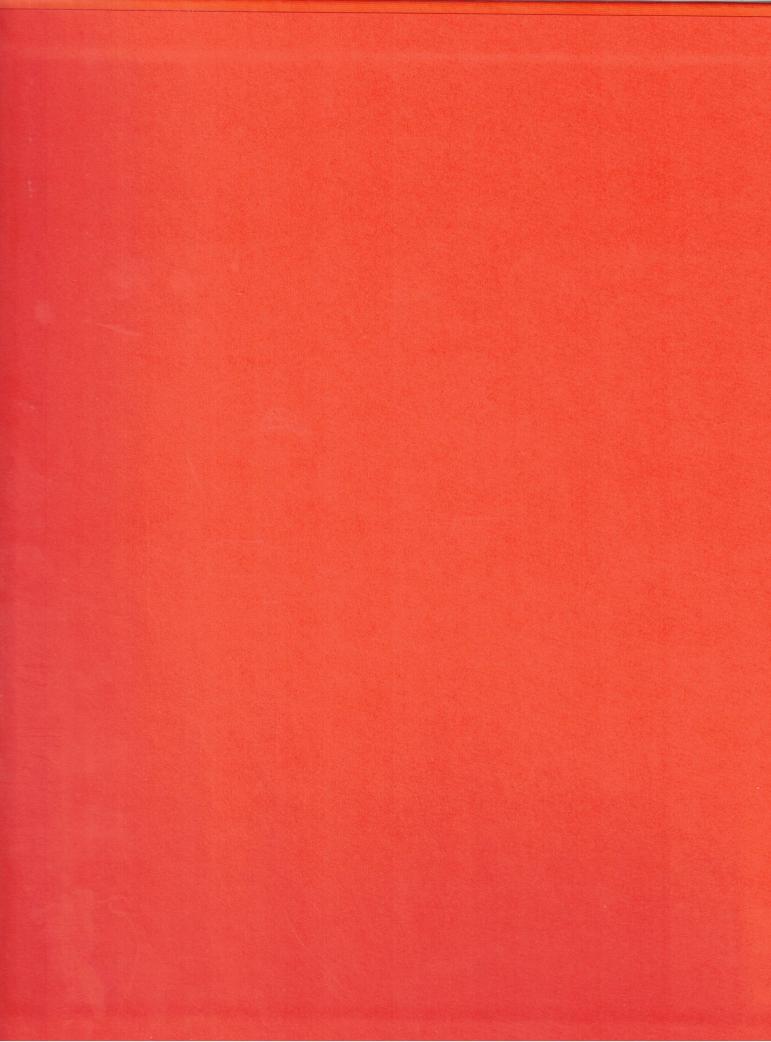
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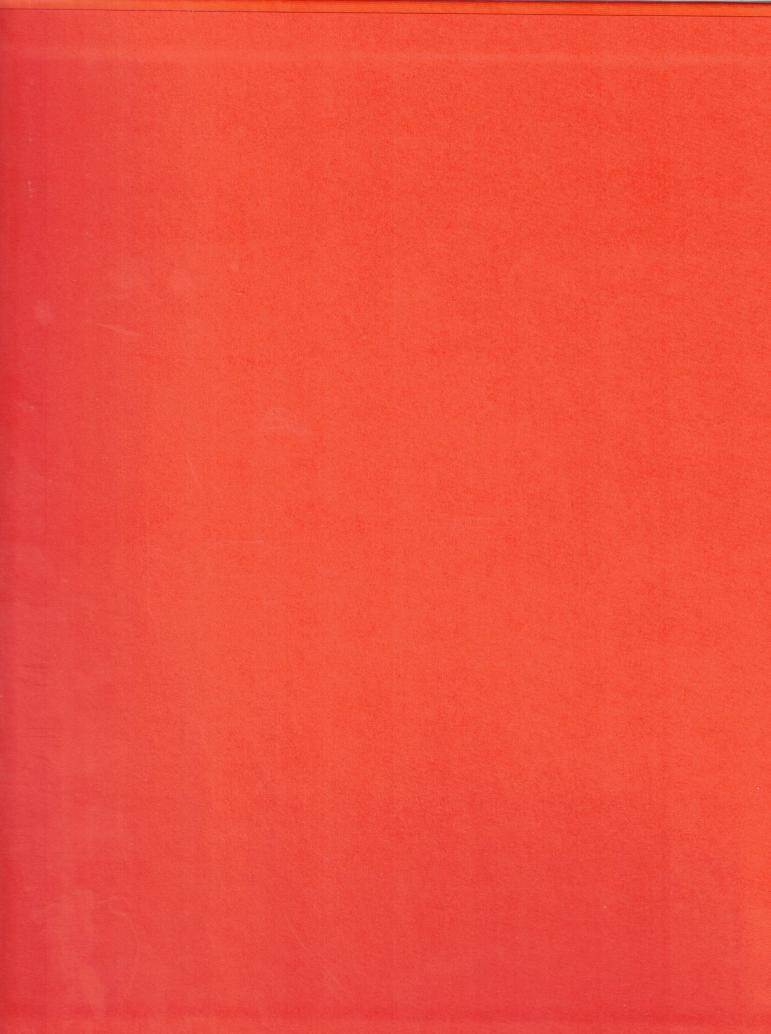
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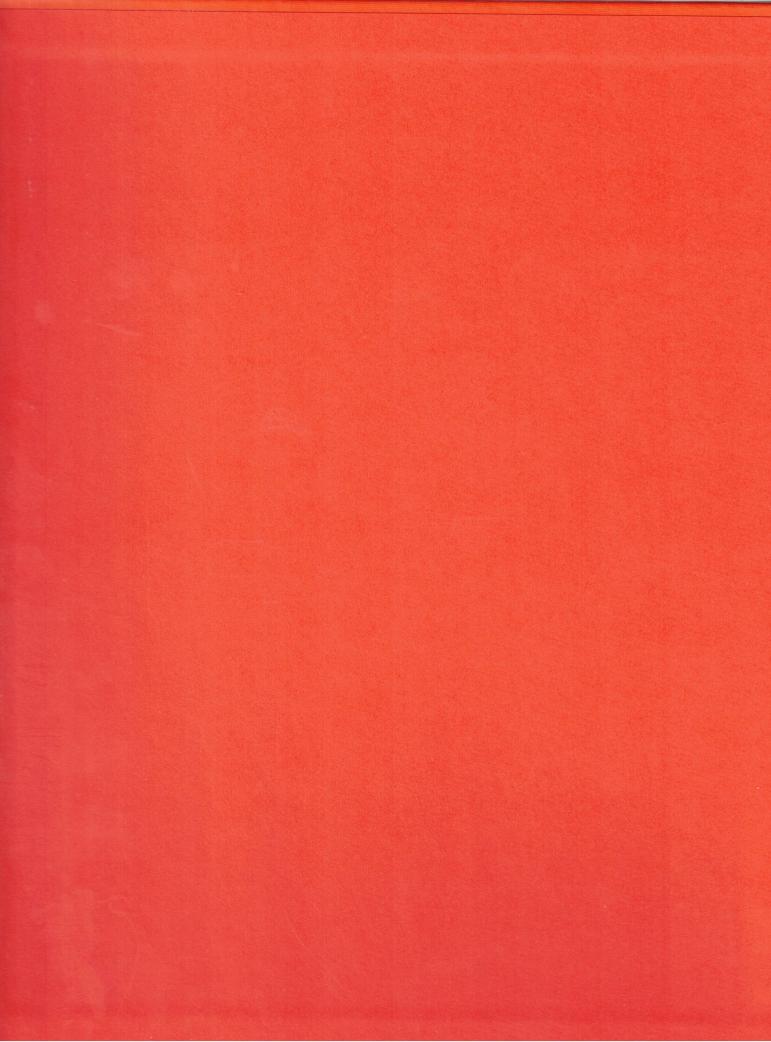
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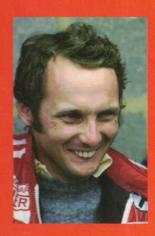
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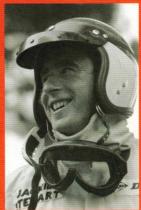












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